



LCD-TV

Chassis : N84A

Model : LA37C630*

LA40C630*

LA46C630*

LA55C630*

LA32C650*

LA37C650*

LA40C650*

LA46C650*

LA55C650*

LA60C650*

SERVICEManual

TFT-LCD TV



LC630 / LC650

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2. Product specifications
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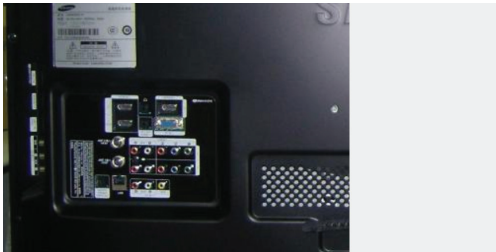
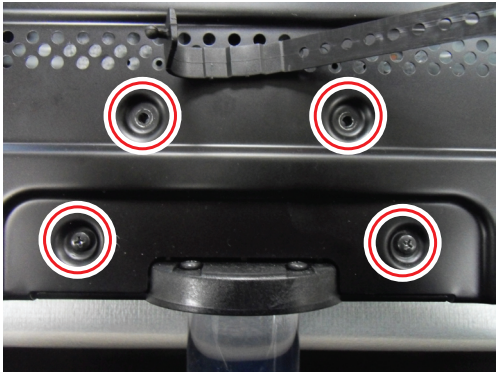
3. Disassembly and Reassembly

This section of the service manual describes the disassembly and reassembly procedures for the LE32C650L1WXXC LCD TV.

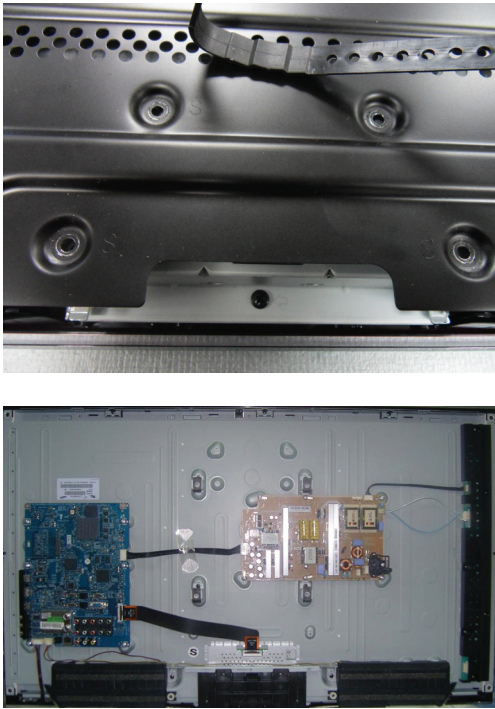
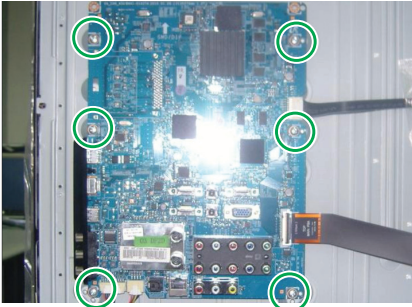
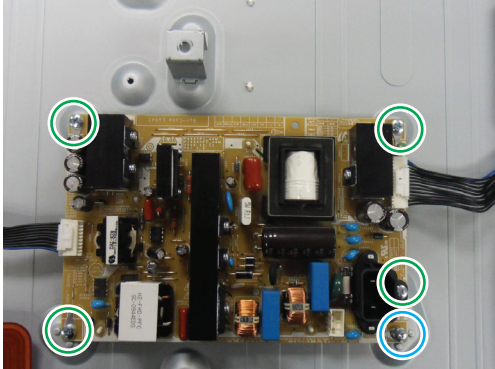
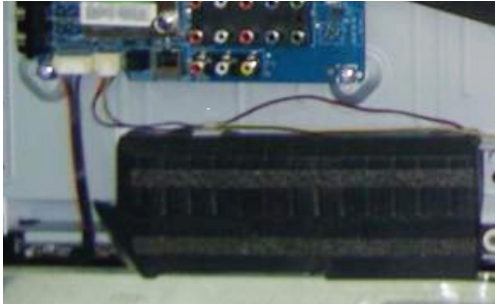
⚠ WARNING: This LCD TV contains electrostatically sensitive devices. Use caution when handling these components.

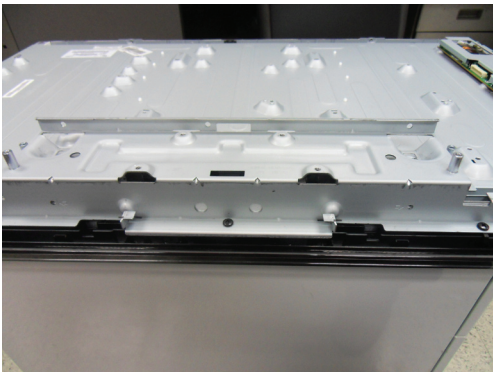
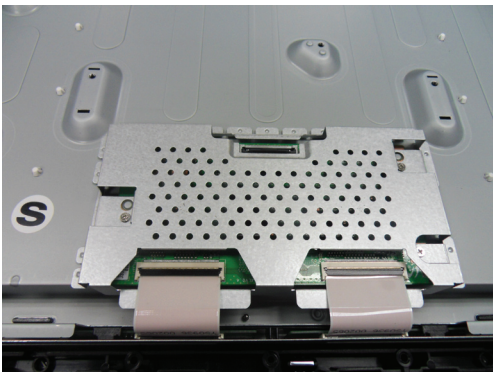
3-1. Disassembly and Reassembly

- ⚠ Cautions:**
- 1. Disconnect the LCD TV from the power source before disassembly.
 - 2. Follow these directions carefully; never use metal instruments to pry apart the cabinet.

Description	Picture Description	Screws
1. Place LCD TV face down on cushioned table. Remove screws from the Stand. Remove stand. Be cautious not to scratch the rear cover when you working with screws.		 6003-001003 (M4, L12, Tapping)
		
		
		
2. Remove the screws of rear-cover.		 6003-001003 (M4, L12, Tapping)

3. Disassembly and Reassembly

Description	Picture Description	Screws
3. Lift up the rear-cover.		
4. Remove the screws of IP and main board.		 6001-002284 (M4, L6, Machine)
5. Remove the speakers and screws of inlet socket.	 	 6001-002284 (M4, L6, Machine)  6001-002284 (M4, L6, Machine)

Description	Picture Description	Screws
6. Remove the screws of Stand BKLT. Lift up the Stand BKLT.		
7. Remove the Side AV Ass'y. (only 46")		
		
		

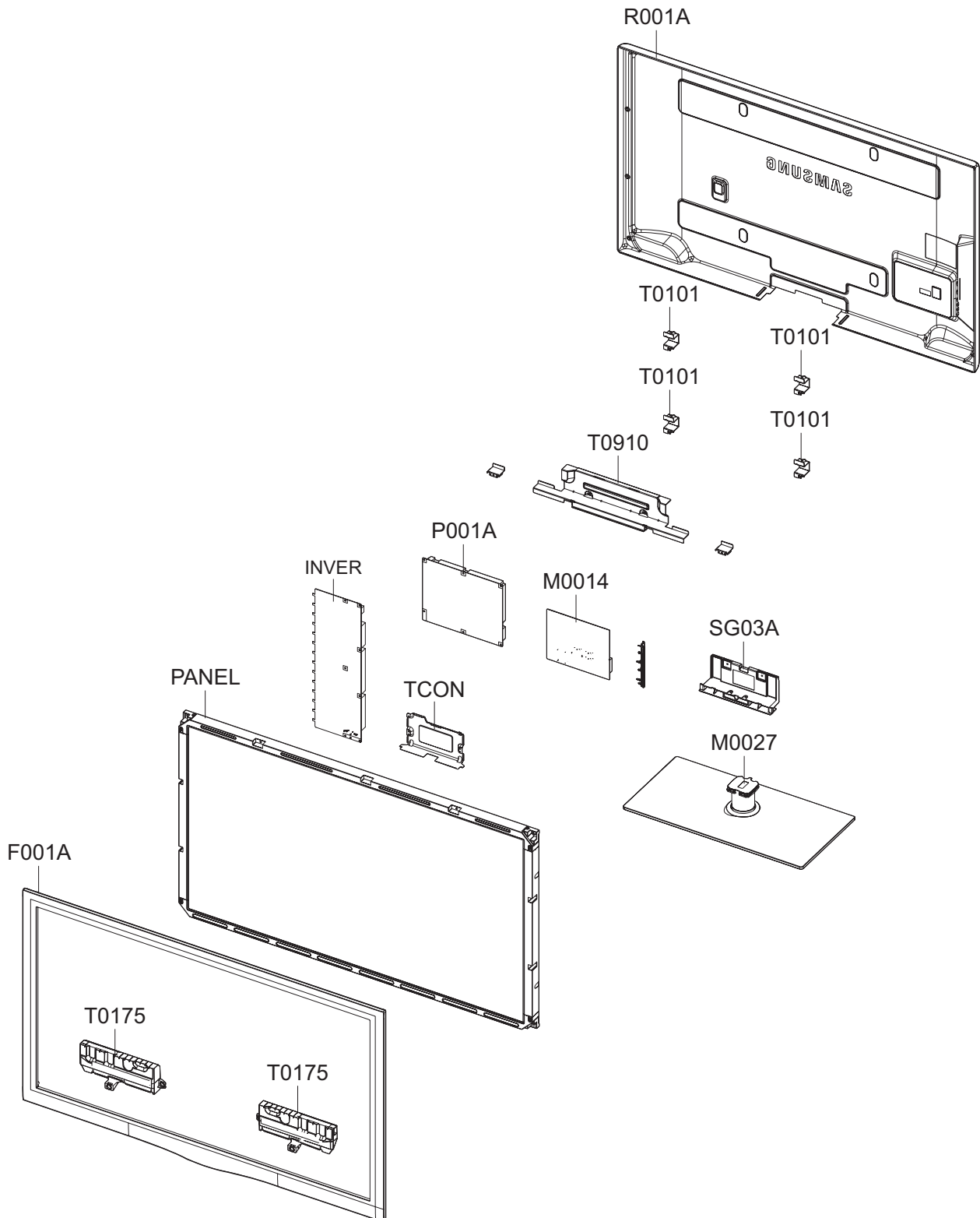
3. Disassembly and Reassembly

Description	Picture Description	Screws
8-1. Remove the screws of bracket. (32")		
8-2. Remove the screws of bracket. (40")		

※ Reassembly procedures are in the reverse order of disassembly procedures.

5. Exploded View & Part List

5-1. LA40C650L1F Exploded View



5-2. LA40C650L1F Parts List

Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
F001A	BN96-12752E	ASSY COVER P-FRONT;40,LC650,CHINA(DTV),P	1	SA	
INVER	BN81-04170A	A/S-BB-L LTF400HF15;LTF400HF15	1	SA	
M0014	BN94-03432A	ASSY PCB MAIN;LA32C650L1MXZK,LC650,N84A	1	SA	
M0027	BN96-12762A	ASSY STAND P-BASE;37,40,EXPORT,TEMPERED	1	SA	
P001A	BN44-00340B	AC VSS(I)-TV;I40F1_ADY,I40F1_ADY,14mA,16	1	SA	
PANEL	BN07-00801A	LCD-PANEL;LTF400HF15,SSDZF6,8bit,40,1.07	1	SA	
R001A	BN96-12767W	ASSY COVER P-REAR;40,LC630,XZ(DTV),PCM,T	1	SA	
SG03A	BN96-12795D	ASSY STAND P-GUIDE;37,40,46,LC650,W/W,PC	1	SA	
T0101	BN61-05996A	BRACKET-WALL;LC650 40,SECC,T1.2	4	SNA	
T0175	BN96-12837A	ASSY SPEAKER P;6ohm,4pin,10W,L:570 R:250	1	SA	
T0910	BN96-13342A	ASSY BRACKET P-STAND LINK;LC530 37/40/46	1	SNA	
TCON	BN81-04154A	A/S-T CON LTF400HF15;LTF400HF15	1	SA	

5-2-1. LA40C650L1F Parts List

Service Bom (SA: SERVICE AVAILABLE, SNA: SERVICE NOT AVAILABLE)

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
0.1		BN90-02439E	ASSY COVER FRONT;LA40C650L1FXXZ	1	SNA	
..2	F001A	BN96-12752E	ASSY COVER P-FRONT;40,LC650,CHINA(DTV),P	1	SA	
...3	AB326	BN61-04661A	BRACKET-STOPPER;L650,SK-5,T0.4,Plating,H	4	SNA	
...3	CCM1	BN63-05199C	COVER-SHEET;AMBER,PE,T0.08,W55mm,200M,CL	4.52	SNA	
...3	CCM1	BN63-05199E	COVER-SHEET;AMBER,PE,T0.08,W85mm,200M,CL	2.02	SNA	
...3		BN64-01223A	DECORATION;40,LC650,PC,V2,RD0045(RED)	1	SNA	
...3		BN96-12757B	ASSY HOLDER P-BOSS BOTTOM;40,46,55,LC650	1	SNA	
...4		BN61-04731A	BOSS-TAPE;AMBER,ACRYL,T1.1,W8.0mm,WHITE	0.41	SNA	
...4		BN61-05983B	HOLDER-BOSS BOTTOM;40,46,55,LC650,ABS,HB	1	SNA	
...3	M0125	BN96-13226B	ASSY BOARD P-TOUCH FUNCTION&IR;LC650,129	1	SA	
...3		BN74-00052A	TAPE-PAPER;LB530,Crepe Paper,0.17mm, 10m	0.05	SNA	
...3		BN60-00162E	SPACER-FOAM;FOAM,50000mm,Dark Gray,0.5T,	0.2	SNA	
...3		BN60-00163C	SPACER-FOAM;LC650-40",FOAM,500,0.5,25,Bo	2	SNA	
...3		BN60-00163H	SPACER-FOAM;LC650-40",FOAM,890,T 0.5,20,	1	SNA	
...3	F001	BN63-06332E	COVER-FRONT;40,LC650,CHINA(DTV),PMMA+PMM	1	SNA	
..2	T0175	BN96-12837A	ASSY SPEAKER P;6ohm,4pin,10W,L:570 R:250	1	SA	
0.1	S001A	BN90-02443B	ASSY STAND;37,40,LC650,W/W,2COAT,ROSE BL	1	SNA	
..2	M0027	BN96-12762A	ASSY STAND P-BASE;37,40,EXPORT,TEMPERED	1	SA	
...3	M0081	6003-001003	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	6	SA	
...3		BN61-04692A	BOSS-PRIMER;#94,clear,35cps	0.1	SNA	
...3		BN61-04731D	BOSS-TAPE;AMBER,ACRYL,T1.1,W20.0mm,WHITE	0.29	SNA	
...3		BN61-05244A	BRACKET-SWIVEL BOTTOM;LB700 46,HGI,T3.0	1	SNA	
...3		BN61-05493A	HOLDER-SWIVEL RING BOTTOM;LB650 40,Aceta	1	SNA	
...3		BN61-05826A	BOSS-BOND;#760,Poly urethane,Black	2.6	SNA	
...3	GSN01	BN61-05994A	GUIDE-STAND NECK;40,LC650,PETG,V2,TP0003	1	SNA	
...4		BN61-06079B	GUIDE-NECK-INSERT;LC650 40,PETG HB,TP000	1	SNA	
...3	CCM1	BN63-04755A	COVER-SHEET;AMBER,PE,T0.05,W150mm,200M,6	1.14	SNA	
...3		BN63-05781D	COVER-STAND GLASS;40,LC650,GLASS,T8.0,2C	1	SNA	
...3	T0527	BN68-01648B	LABEL WARNING;WW,PET,T0.05,40,25,EXPORT	1	SNA	
...3	M0126	BN73-00215A	RUBBER-FOOT;40LB650,RUBBER,15*25,60,4.0,	4	SNA	
...3	M0126	BN73-00217A	RUBBER-FOOT;LB650,RUBBER,DIA30,7.5,Dark	4	SNA	
...3		BN74-00031A	GREASE;kanto-kasei FL-955,grease,wht	0.4	SNA	
...3	FD01	BN63-06913A	COVER-DECORATION;LB7000 46,ABS+PMMA,HB,H	1	SNA	
...3		BN61-05652C	BRACKET-STAND BOTTOM;B650 40,SGCC,T2.0,V	1	SNA	
..2	SG03A	BN96-12795D	ASSY STAND P-GUIDE;37,40,46,LC650,W/W,PC	1	SA	
...3	T0920	BN61-06003A	GUIDE-STAND;37,40,46,LC650,PC+G/F,20%,V2	1	SNA	
...3		BN68-02766B	MANUAL FLYER-STAND GUIDE;L550~L750,SAMSU	1	SNA	
...3		BN96-12031G	ASSY ACCESSORY-SCREW;10 LCD-TV,6003-0010	1	SNA	
...4	M0081	6003-001003	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	9	SA	
...4	T0524	6902-000341	BAG PE;LDPE,T0.05,L90,W70,TRP,,,PE MARK	1	SNA	
...3	T0524	6902-001063	BAG PE;LDPE,T0.05,W180,L350,TRP,RECYCLE	1	SNA	
0.1	R001A	BN90-02448W	ASSY COVER REAR;40,	1	SNA	
..2	M0081	6003-001003	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	11	SA	
..2	R001A	BN96-12767W	ASSY COVER P-REAR;40,LC630,XZ(DTV),PCM,T	1	SA	
...3	R001	BN63-06393F	COVER-REAR;40,LC650,SO,PCM,T0.5,BLK	1	SNA	
...3	T0071	BN64-01251C	INLAY-TERMINAL;LC650,PS SHEET,T0.5,CHINA	1	SNA	
...3		BN64-01270C	INLAY-AV;LC650,PS SHEET,T0.5,CO	1	SNA	
...3	T0139	BN65-00003A	CLAMPER BAG;42C7,LDPE,HB,BLK	1	SNA	

5. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...3	AH358	BN61-06545A	HOLDER-REAR;LC650 37/40/46,PP,BLK	1	SNA	
...3		BN60-00162C	SPACER-FOAM;FOAM,50000mm,Dark Gray,0.5T,	0.96	SNA	
0.1		BN91-04890A	ASSY LCD-AMLCD;BN07-00801A	1	SNA	
..2	PANEL	BN07-00801A	LCD-PANEL;LTF400HF15,SSDZF6,8bit,40,1.07	1	SA	
...3	TCON	BN81-04154A	A/S-T CON LTF400HF15;LTF400HF15	1	SA	
...3	INVER	BN81-04170A	A/S-BB-L LTF400HF15;LTF400HF15	1	SA	
0.1	M0017	BN91-05241A	ASSY CHASSIS;LC650,N84A	1	SNA	
..2	M0014	BN94-03432A	ASSY PCB MAIN;LA32C650L1MXZK,LC650,N84A	1	SA	
...3		3701-001480	CONNECTOR-DSUB;15P,3R,FEMALE,STAMPED PIN	1	SA	
...3		3711-007302	HEADER-BOARD TO BOARD;BOX,18P,2R,2mm,ANG	1	SA	
...3	JA333	3722-002892	JACK-PIN;10P,Ni,R,W,R,B,G,STRAIGHT	1	SA	
...3		BN97-04222A	ASSY SMD;LA32C650L1MXZK,LC650,N84A	1	SNA	
....4	DS01A	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	18	SA	
....4		0403-001180	DIODE-ZENER;BZX84C6V2,5.8-6.6V,350mW,SOT	4	SA	
....4		0403-001783	DIODE-ZENER;BZB84-C6V2,5.8/6.6V,300mW,SO	16	SNA	
....4	D0254	0404-001404	DIODE-SCHOTTKY;BAT721C,40V,200mA,SOT-23,	4	SA	
....4	T0139	0406-001200	DIODE-TVS;RCLAMP0504F,6/-V,150W,SC-70	2	SA	
....4	T0139	0406-001271	DIODE-TVS;RCLAMP0524P,6/-V,150W,SLP251	9	SNA	
....4	Q101	0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	10	SA	
....4		0501-000669	TR-SMALL SIGNAL;KTA1505Y,PNP,150mW,SOT-2	2	SA	
....4	CEQ2	0505-000110	FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0.	1	SA	
....4	Q409	0505-000274	FET-SILICON;AO4435L,P,-30V,-11A,0.014ohm	1	SNA	
....4	IC104	0801-003330	IC-CMOS LOGIC;Octal buffer,DQFN,20P,4.5x	2	SA	
....4	IC106	1001-001573	IC-VIDEO SWITCH;Sil9287BCNUTR,QFN,72P,10	1	SNA	
....4		1006-001266	IC-LINE TRANSCEIVER;3232,TSSOP,16P,174mI	1	SA	
....4	IC112	1103-001310	IC-EEPROM;24LC02B,256X8BIT,SOIC,8P,3.91X	2	SNA	
....4	IC112	1103-001475	IC-EEPROM;M24256-BR,256Kbit,32Kx8,SOP,8P	1	SNA	
....4		1105-001931	IC-DDR2 SDRAM;K4T51163Q,DDR2-800,512Mbit	2	SA	
....4		1105-002058	IC-DDR2 SDRAM;K4T1G164QE-HCF8,DDR2,1Gbit	2	SA	
....4		1105-002075	IC-DDR2 SDRAM;K4T1G084QE-HCF8,DDR2,1Gbit	4	SA	
....4	T0085	1201-002487	IC-AUDIO AMP;MAX9728A,QFN,12P,3x3mm,DUAL	1	SA	
....4	T0124	1201-002992	IC-POWER AMP;STA369BWS,PSSO,36P,10.3x7.5	1	SA	
....4	T0087	1203-002519	IC-POSIFIXED REG.;KIA7809AF,DPAK,3P,240	1	SA	
....4	IC012	1203-003544	IC-POSIAJUST REG.;RT9173BPS,SOP-8,8P,5	1	SA	
....4		1203-004363	IC-VOL. DETECTOR;RT9818C-29PV,SOT-23,3P,	1	SA	
....4		1203-006012	IC-DC/DC CONVERTER;MP8725EL,QFN14,14P,3x	1	SA	
....4		1203-006017	IC-VOL. DETECTOR;RT9824GJ8,TSOT23,8P,2.9	1	SA	
....4		1203-006104	IC-DC/DC CONVERTER;MP8707EN,SOIC8E,8P,4.	4	SA	
....4	T0087	1203-006109	IC-POSIFIXED REG.;S-1206B33-M3T1G,SOT-2	1	SA	
....4	T0087	1203-006141	IC-POSIFIXED REG.;S-1172B33-U5T1G,SOT-8	3	SA	
....4		1203-006142	IC-DC/DC CONVERTER;BD8924G,5P,2.9x1.6x1.	1	SA	
....4		1203-006167	IC-POSIFIXED REG.;S-1172B12-U5T1G,SOT-8	1	SA	
....4	IC118	1204-003085	IC-VIDEO PROCESS;SDP91-PS,PBGA,496P,23x2	1	SA	
....4		1204-003100	IC-DECODER;SDP92,FCPBGAH,937P,35x35mm,PL	1	SA	
....4	IC118	1204-003101	IC-VIDEO PROCESS;SDP94,PBGA,345P,19x19mm	1	SNA	
....4		1205-003201	IC-BUS SWITCH;TC7WB125FK,SSOP,8P,2x2.3mm	1	SA	
....4		1205-003733	IC-SWITCH;AP2191MPG-13,MSOP-8L-EP,8P,2.9	1	SA	
....4		1205-003735	IC-SWITCH;AP2151WG-7,SOT25,5P,2.9x1.6mm,	1	SA	
....4		1205-003834	IC-ETHERNET CONTROLLER;RTL8201E-VC-GR,QF	1	SA	
....4		1205-003840	IC-CODEC;WM8595GEFL/RS,QFN,48P,7x7x0.9mm	1	SA	
....4		1405-001185	VARISTOR;24Vdc,1.6x0.8x0.36mm,TP	1	SA	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4		1405-001233	VARISTOR;30Vdc,5A,1.6x0.8x0.8mm,TP	30	SA	
....4	MR604	2007-000137	R-CHIP;2Kohm,5%,1/16W,TP,1005	14	SNA	
....4	MR306	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,TP,1005	7	SNA	
....4	MR36	2007-000153	R-CHIP;22Kohm,5%,1/16W,TP,1005	4	SNA	
....4	AR43	2007-000155	R-CHIP;27Kohm,5%,1/16W,TP,1005	3	SNA	
....4	MR13	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	19	SNA	
....4	R509	2007-000170	R-CHIP;1Mohm,5%,1/16W,TP,1005	4	SNA	
....4	R111	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	62	SNA	
....4	HDR17	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	6	SNA	
....4	R338	2007-000173	R-CHIP;22ohm,5%,1/16W,TP,1005	35	SNA	
....4	UR23	2007-000174	R-CHIP;47ohm,5%,1/16W,TP,1005	4	SNA	
....4		2007-000231	R-CHIP;1.3Kohm,1%,1/10W,TP,1608	2	SA	
....4	MR39	2007-000242	R-CHIP;1.5Kohm,5%,1/16W,TP,1005	1	SNA	
....4	UR53	2007-000305	R-CHIP;10Mohm,5%,1/10W,TP,1608	1	SA	
....4	HR12	2007-000591	R-CHIP;22ohm,1%,1/10W,TP,1608	1	SNA	
....4		2007-000606	R-CHIP;240ohm,1%,1/10W,TP,1608	2	SA	
....4	JR11	2007-000614	R-CHIP;24Kohm,1%,1/10W,TP,1608	2	SNA	
....4	R945	2007-000726	R-CHIP;300ohm,1%,1/10W,TP,1608	1	SA	
....4	R19	2007-000763	R-CHIP;330ohm,1%,1/10W,TP,1608	1	SNA	
....4	R124	2007-000775	R-CHIP;33Kohm,5%,1/16W,TP,1005	1	SNA	
....4	OTR1	2007-001292	R-CHIP;33ohm,5%,1/16W,TP,1005	5	SNA	
....4		2007-001295	R-CHIP;39ohm,5%,1/16W,TP,1005	1	SA	
....4	CER07	2007-001308	R-CHIP;200ohm,5%,1/16W,TP,1005	1	SNA	
....4	R326	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,TP,1005	5	SNA	
....4		2007-001333	R-CHIP;18Kohm,5%,1/16W,TP,1005	3	SNA	
....4	PR24	2007-002970	R-CHIP;56ohm,5%,1/16W,TP,1005	6	SA	
....4		2007-003022	R-CHIP;62ohm,5%,1/16W,TP,1005	17	SNA	
....4		2007-007008	R-CHIP;300ohm,5%,1/16W,TP,1005	1	SNA	
....4	R365	2007-007107	R-CHIP;100Kohm,1%,1/16W,TP,1005	13	SNA	
....4		2007-007132	R-CHIP;15Kohm,1%,1/16W,TP,1005	1	SA	
....4		2007-007136	R-CHIP;4.7Kohm,1%,1/16W,TP,1005	61	SNA	
....4		2007-007137	R-CHIP;1.2Kohm,1%,1/16W,TP,1005	1	SA	
....4	DR4	2007-007142	R-CHIP;10Kohm,1%,1/16W,TP,1005	28	SNA	
....4		2007-007156	R-CHIP;1ohm,5%,1/16W,TP,1005	8	SNA	
....4		2007-007197	R-CHIP;3.3ohm,5%,1/16W,TP,1005	1	SNA	
....4		2007-007239	R-CHIP;31.6Kohm,1%,1/10W,TP,1608	1	SNA	
....4		2007-007306	R-CHIP;100ohm,1%,1/16W,TP,1005	43	SNA	
....4		2007-007309	R-CHIP;12Kohm,1%,1/16W,TP,1005	2	SA	
....4		2007-007318	R-CHIP;1Kohm,1%,1/16W,TP,1005	57	SNA	
....4		2007-007469	R-CHIP;110ohm,1%,1/16W,TP,1005	1	SNA	
....4	HDR44	2007-007470	R-CHIP;7.5Kohm,1%,1/16W,TP,1005	2	SNA	
....4		2007-007617	R-CHIP;2.49Kohm,1%,1/10W,TP,1608	1	SA	
....4		2007-007698	R-CHIP;5.1Kohm,1%,1/16W,TP,1005	3	SNA	
....4		2007-007724	R-CHIP;40.2ohm,1%,1/10W,TP,1608	2	SA	
....4		2007-007730	R-CHIP;6.8Mohm,1%,1/10W,TP,1608	1	SA	
....4		2007-007947	R-CHIP;36ohm,1%,1/10W,TP,1608	1	SA	
....4	MR11	2007-008015	R-CHIP;75ohm,1%,1/16W,TP,1005	18	SNA	
....4		2007-008134	R-CHIP;12.4Kohm,1%,1/16W,TP,1005	1	SC	
....4		2007-008263	R-CHIP;3Kohm,1%,1/16W,TP,1005	1	SNA	
....4		2007-008391	R-CHIP;6.34Kohm,1%,1/16W,TP,1005	1	SA	
....4		2007-008811	R-CHIP;1.5ohm,5%,1/16W,TP,1005	1	SNA	

5. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4		2007-009853	R-CHIP;1.6Kohm,1%,1/16W,TP,1005	1	SNA	
....4		2011-001015	R-NETWORK;1Kohm,5%,1/16W,L,CHIP,8P,TP,3.	4	SC	
....4	DAR09	2011-001262	R-NETWORK;22ohm,5%,1/16W,L,CHIP,8P,TP,2.	25	SA	
....4		2011-001264	R-NETWORK;10ohm,5%,1/16W,L,CHIP,8P,TP,2.	6	SNA	
....4		2011-001345	R-NETWORK;10Kohm,5%,1/16W,L,CHIP,8P,TP,2	1	SA	
....4	DRP29	2011-001396	R-NETWORK;4.7Kohm,5%,1/16W,L,CHIP,8P,TP,	1	SA	
....4		2011-001427	R-NETWORK;0ohm,5%,1/16W,L,CHIP,8P,TP,2.0	3	SNA	
....4		2011-001448	R-NETWORK;10ohm,5%,1/16W,L,4P,T,1010	16	SA	
....4		2011-001449	R-NETWORK;22ohm,5%,1/16W,L,4P,TP,1010	9	SA	
....4		2011-001497	R-NETWORK;470ohm,5%,1/16W,L,CHIP,4P,TP,1	1	SNA	
....4		2011-001585	R-NETWORK;47ohm,5%,1/16W,L,CHIP-V,4P,TP,	1	SNA	
....4		2011-001589	R-NETWORK;0ohm,5%,1/16W,L,CHIP-V,4P,TP,1	1	SNA	
....4	C24	2203-000041	C-CER,CHIP;0.01nF,0.25pF,50V,C0G,1608	1	SNA	
....4	AC1	2203-000125	C-CER,CHIP;1.2nF,10%,50V,X7R,TP,1608,-	4	SA	
....4	PC43	2203-000233	C-CER,CHIP;0.1nF,5%,50V,C0G,TP,1005	4	SA	
....4	DC54	2203-000278	C-CER,CHIP;.01nF,0.5pF,50V,C0G,TP,1005	2	SA	
....4	RC34	2203-000280	C-CER,CHIP;0.01nF,0.5pF,50V,C0G,1608	3	SA	
....4	C3	2203-000384	C-CER,CHIP;0.015nF,5%,50V,C0G,1608	2	SNA	
....4	C304	2203-000405	C-CER,CHIP;0.18nF,5%,50V,C0G,1608	1	SNA	
....4	MC302	2203-000425	C-CER,CHIP;.018nF,5%,50V,C0G,TP,1005	10	SA	
....4	C254	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,TP,1005	11	SA	
....4	V1233	2203-000575	C-CER,CHIP;220nF,10%,25V,X7R,TP,2012	6	SNA	
....4	ZC14	2203-000626	C-CER,CHIP;0.022nF,5%,50V,C0G,1608	1	SNA	
....4	AD480	2203-000679	C-CER,CHIP;0.027nF,5%,50V,C0G,1005	4	SNA	
....4	DC25	2203-000812	C-CER,CHIP;.033nF,5%,50V,C0G,1005	9	SA	
....4	CK40B	2203-000838	C-CER,CHIP;0.39nF,5%,50V,C0G,TP,1608	2	SNA	
....4	AD480	2203-000995	C-CER,CHIP;.047nF,5%,50V,C0G,TP,1005	2	SA	
....4	KAC5	2203-001126	C-CER,CHIP;0.68nF,10%,50V,X7R,1608	1	SNA	
....4	AD480	2203-001412	C-CER,CHIP;0.03nF,5%,50V,NP0,TP,1005	10	SNA	
....4	AD480	2203-001428	C-CER,CHIP;470nF,10%,50V,X7R,TP,2012	1	SNA	
....4	AD480	2203-001851	C-CER,CHIP;0.016nF,5%,50V,NP0,TP,1608	2	SNA	
....4	AD480	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	14	SNA	
....4	AVC08	2203-002398	C-CER,CHIP;22nF,10%,50V,X7R,1608	15	SNA	
....4	AD480	2203-002525	C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1005	2	SNA	
....4	AD480	2203-002720	C-CER,CHIP;10nF,10%,25V,X7R,TP,1005	4	SNA	
....4	DC108	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	3	SC	
....4	DC18	2203-005138	C-CER,CHIP;1.8nF,10%,50V,X7R,1005	6	SA	
....4	AAC1	2203-005249	C-CER,CHIP;100nF,10%,50V,X7R,TP,1608	16	SNA	
....4	AD480	2203-005344	C-CER,CHIP;22nF,10%,25V,X7R,TP,1005,-	23	SNA	
....4	AD480	2203-005533	C-CER,CHIP;1000nF,20%,6.3V,X7R,TP,1608	2	SNA	
....4	PC8	2203-005642	C-CER,CHIP;0.22nF,5%,50V,NP0,1005	1	SNA	
....4	AD480	2203-005968	C-CER,CHIP;4.7nF,10%,50V,X7R,TP,1005	2	SNA	
....4	VC37	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,TP,1005	2	SA	
....4	AD480	2203-006104	C-CER,CHIP;1000nF,10%,50V,X7R,3225	1	SA	
....4	AD480	2203-006126	C-CER,CHIP;47nF,10%,16V,X7R,1005	3	SNA	
....4	PC11	2203-006141	C-CER,CHIP;1000nF,10%,16V,X5R,1608	2	SNA	
....4	C102	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	321	SNA	
....4	AD480	2203-006307	C-CER,CHIP;1000nF,10%,25V,X5R,2012	11	SNA	
....4	AD480	2203-006333	C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216	10	SNA	
....4	AD480	2203-006336	C-CER,CHIP;10000nF,10%,25V,X5R,3216	7	SA	
....4	C125	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,TP,2012	29	SC	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	HE4	2203-006474	C-CER,CHIP;22000nF,20%,6.3V,X5R,2012	11	SA	
....4	HDC11	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,TP,1005	45	SNA	
....4	AD480	2203-006824	C-CER,CHIP;4700nF,10%,10V,X5R,1608	4	SNA	
....4	AD480	2203-006992	C-CER,CHIP;0.33nF,5%,50V,C0G,TP,1005	8	SNA	
....4	AD480	2203-007176	C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012 (	2	SNA	
....4	AD480	2203-007233	C-CER,CHIP;22000nF,10%,16V,X5R,TP,3216	5	SA	
....4	AD480	2203-007270	C-CER,CHIP;10000nF,10%,10V,X5R,TP,1608	61	SNA	
....4	T0052	2703-000125	INDUCTOR-SMD;10uH,10%,2012	8	SA	
....4	T0052	2703-000158	INDUCTOR-SMD;1uH,10%,2012	9	SA	
....4	VL6	2703-000398	INDUCTOR-SMD;10uH,10%,3225	1	SA	
....4	T0052	2703-001239	INDUCTOR-SMD;3.3uH,10%,1608	3	SA	
....4	T0052	2703-002332	INDUCTOR-SMD;330nH,5%,1608	1	SA	
....4	T0052	2703-002557	INDUCTOR-SMD;270NH,5%,1608	1	SNA	
....4	T0052	2703-003150	INDUCTOR-SMD;4.7uH,20%,5050	4	SNA	
....4		2703-003296	INDUCTOR-SMD;47uH,10%,2012	1	SNA	
....4	T0052	2703-003362	INDUCTOR-SMD;4.7uH,20%,7070	1	SA	
....4	T0052	2703-003713	INDUCTOR-SMD;1.5uH,20%,7366	1	SA	
....4	X202	2801-003326	CRYSTAL-SMD;24MHz,30ppm,28-ABX,20pF,50oh	2	SA	
....4	X202	2801-003773	CRYSTAL-SMD;12MHz,30ppm,28-AAN,20pF,50oh	1	SA	
....4	X202	2801-003954	CRYSTAL-SMD;27MHz,30ppm,28-AAN,16pF,50oh	1	SA	
....4	X202	2801-004629	CRYSTAL-SMD;27MHz,20ppm,12pF,50ohm,TP	1	SNA	
....4	X202	2801-004734	CRYSTAL-SMD;25.000000MHz,20ppm,28-AAN,12	1	SA	
....4		2804-001878	OSCILLATOR-CLOCK;49.152MHz,50ppm,10TTL/1	1	SA	
....4	F103	2901-001506	FILTER-EMI SMD;5V,0.13A,0pF,2x1x0.5mm,TP	2	SA	
....4	DR32	3301-000314	BEAD-SMD;120ohm,1.6x0.8x0.8mm,-,-,-	2	SNA	
....4	T0568	3301-001236	BEAD-SMD;60ohm,1608	12	SNA	
....4	T0568	3301-001404	BEAD-SMD;30ohm,2012,TP,15.9OHM/30MHz	41	SA	
....4	T0568	3301-001526	BEAD-SMD;10ohm,1.6x0.8x0.8mm,1000mA,TP,,	20	SNA	
....4	T0568	3301-002039	BEAD-SMD;26ohm,1608,TP	9	SA	
....4	T0313	3404-001207	SWITCH-TACT;12V,50mA,160gf,6.2X6.2,SPST	1	SA	
....4		3701-001591	CONNECTOR-HDMI;19P,2ROW,FEMALE,SMD-S,AU	3	SNA	
....4	AC510	3708-002777	CONNECTOR-FPC/FFC/PIC;82P,0.5mm/0.75mm,S	1	SA	
....4	CON_US	3711-005616	HEADER-BOARD TO CABLE;BOX,10P,1R,2mm,SMD	1	SNA	
....4	HB01A	3711-007336	HEADER-BOARD TO CABLE;BOX,4P,1R,2.5mm,SM	1	SA	
....4		BN41-01437A	PCB MAIN;C650 CN,FR-4,4,1.2T,213*270,1	1	SNA	
....4		0202-001767	SOLDER-CREAM;LST-5710,D20~38,Sn-57Bi-1Ag	7.5	SNA	
....4		1001-000164	IC-ANALOG MULTIPLEX;74HC4052,CMOS,SOP,16	1	SA	
....4	IC012	1203-006138	IC-POS.ADJUST REG.;AP1117DGZ-13-89,TO-2	1	SA	
....4		2007-000946	R-CHIP;47ohm,1%,1/10W,TP,1608	4	SA	
....4		2007-001335	R-CHIP;36Kohm,5%,1/16W,TP,1005	4	SA	
....4	T0052	2703-003790	INDUCTOR-SMD;4.7uH,20%,8080	3	SA	
....4		3701-001693	CONNECTOR-HDMI;19P,2ROW,FEMALE,SMD-A	1	SA	
....4	AD480	2203-005393	C-CER,CHIP;0.005nF,0.1pF,50V,NP0,TP,1005	1	SNA	
....4		BN97-04394A	ASSY MICOM;T-VALDEUS-3000,N84A,Sub LC650	1	SNA	
.....5	IC520	0903-001651	IC-MICROCONTROLLER;61P802-RG480WT,LQFP,4	1	SNA	
....4		BN97-04396A	ASSY MICOM;T-VALDCNC-0024,N84A,LC650 CN,	1	SNA	
.....5		1107-001868	IC-NAND FLASH;KFG8GH6U4M-AIB6,1GByte,512	1	SNA	
...3	ET01	BN40-00183A	TUNER;DNCS443VL161A(S),DTMB/PAL/NTSC,75o	1	SA	
...3	JA333	3722-003040	JACK-PIN;3P W/L,SN,BLK/YEL/WHT/RED,ANGLE	1	SA	
...3		0202-001608	SOLDER-WIRE FLUX;LFC7-107,D0.8,99.3Sn/0.	1	SNA	
...3	CN906	3707-001096	CONNECTOR-OPTICAL;STRAIGHT W/L,SPDIF	1	SA	

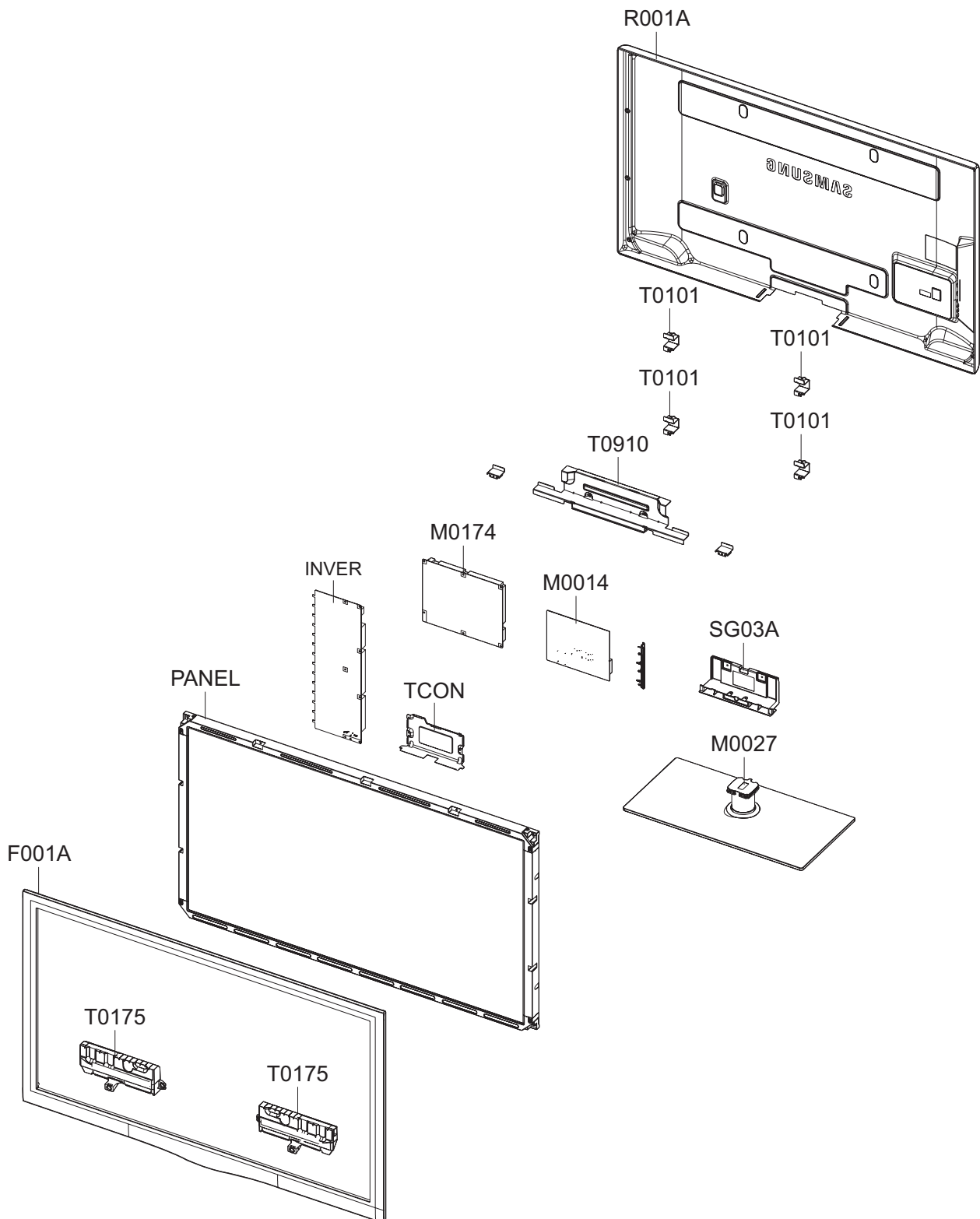
5. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...3		3722-003037	JACK-USB;4P/1C W/L,AU/NI,BLK,ANGLE,A	2	SA	
...3	JA330	3722-003038	JACK-PHONE;7P/1C W/L,SN,BLK	2	SA	
...3		3722-003051	JACK-PIN;3P W/L,NI/SN,YEL/WHT/RED,STRAIG	1	SA	
...3		3722-003058	JACK-MODULAR;8P/8C W/L,Y,STRAIGHT,N,AU,1	1	SA	
...3	T0066	BN62-00071A	HEAT SINK-ES;22*22*2.5,Ceramic,T2.6,TAPE	1	SNA	
...3		BN62-00083A	HEAT SINK-ES;27*15.5*5,Ceramic,T5,TAPE	1	SNA	
...3		BN62-00084A	HEAT SINK-ES;LE32C650L1WXXC,A6063,2.5,28	1	SNA	
...3	T0066	BP62-00064B	HEAT SINK-ES;ROBOCOP,A6063,T4.0,40,40,BL	1	SNA	
0.1		BN91-05276D	ASSY SHIELD;LA46C550J1FXXZ	1	SNA	
..2	T0081	6001-002284	SCREW-MACHINE;BH,+,M4,L8,ZPC(WHT),SWRCH1	11	SA	
..2	M0081	6003-000337	SCREW-TAPTYPE;BH,+,S,M4,L10,ZPC(BLK),SWR	6	SA	
..2	M0081	6003-001003	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	6	SA	
..2	P001A	BN44-00340B	AC VSS(I)-TV;I40F1_ADY,I40F1_ADY,14mA,16	1	SA	
...3		BN81-04736A	A/S-FUSE;55T 203150,FI801S (QI809,825),B	1	SA	
...3		BN81-04737A	A/S-FUSE;55T 206300,FS801S (QP801,802),F	1	SA	
...3		BN81-04755A	A/S-MOSFET;AP9467GH,QM851,BN44-00340B	1	SA	
...3		BN81-04772A	A/S-MOSFET;TK8A50D,QP801,802 (FS801S),BN	2	SA	
...3		BN81-04778A	A/S-PWM CONTROL IC;FAN7530,ICP801S,ICP80	1	SA	
...3		BN81-04785A	A/S-PWM CONTROL IC;STRW6052,ICM801(FS801	1	SA	
..2	M0230	BN96-12723C	ASSY CABLE P-FPCB LVDS CABLE;120Hz-40inc	1	SA	
..2	M0523	BN96-12973A	ASSY BRACKET P-WALL;32,37,40,LC650,SECC,	4	SNA	
...3	T0101	BN61-05996A	BRACKET-WALL;LC650 40,SECC,T1.2	4	SNA	
...3		BN60-00188B	SPACER-FOAM;LCD,FELT,20,3.0,20,Center :	4	SNA	
..2	T0910	BN96-13342A	ASSY BRACKET P-STAND LINK;LC530 37/40/46	1	SNA	
...3		BN61-02429K	STUD-PEM;PNB,M3.8,D7,L14.9,ZPC(SIL),SUM2	2	SNA	
...3	M0115	BN61-05998A	BRACKET-STAND LINK;LC650 46,SECC,T1.6	1	SNA	
...3		BN61-05281A	HOLDER-CLAMP;LCD,NYLON 66,WHT	3	SNA	
..2	T0081	6001-002604	SCREW-MACHINE;BH,+,M4,L10,ZPC(WHT),SWRCH	2	SA	
..2		BN61-06441A	HOLDER-INLET;LC530,ABS,V0	1	SNA	
..2	M2893	BN39-01024E	LEAD CONNECTOR;LC5F,UL3239#24,2P,175mm,1	1	SA	
..2	M2893	BN39-01279E	LEAD CONNECTOR;LB6T,Flat Connector Ass'y	1	SA	
..2	CIS1	0203-001586	TAPE-FILAMENT;#893,0.15,25,55	0.32	SNA	
..2		BN73-00273B	SILICON/RUBBER-GAPPAD;UE32C6500,SILICON+	1	SNA	
..2		BN61-06559A	HOLDER-GROUND;LC550,SUS304,0.3	2	SNA	
..2		BN98-02766A	ASSY K/D-SHIELD AV;LA37C630K1F,N84A,DTV	1	SNA	
...3	M2893	BN39-01267E	LEAD CONNECTOR;LB6T,FLAT CONNECTOR ASS'Y	1	SA	
...3		BN61-05990B	HOLDER-SIDE AV;40,LC650,ABS+PMMA,BK0007,	1	SNA	
0.1		BN92-05851G	ASSY BOX;40,LC650,CHINA	1	SNA	
..2		BN69-04637G	BOX-SET;40LC650,CB,A-01,DW3,YEL,W1195,D1	1	SNA	
..2		BH68-00662A	LABEL BOX-00;ALL MODEL,MOJO 90G,60,110,W	1	SNA	
0.1		BN92-05947A	ASSY LABEL;LA46C630K1FXXZ,N84A	1	SNA	
..2	T0527	BP68-00052B	LABEL-00,RATING;CCTV,TETRON PAPER,T0.05,	1	SNA	
0.1	ACCE1	BN92-05948A	ASSY ACCESSORY;LA40C650L1FXXZ,N84A,LC650	1	SNA	
..2		BN96-13675A	ASSY ACCESSORY-MANUAL;LA40C650L1FXXZ,LC6	1	SNA	
...3	T0524	6902-000110	BAG PE;LDPE,T0.05,W250,L400,TRP,28,2,9.2	1	SNA	
...3	T0527	AA68-00764A	LABEL-PASSING;SAMSUNG ALL,ART PAPER,CLR,	1	SNA	
...3	T0527	AA68-02517A	LABEL;PJTV(TTSEC),COPPERPLATE,50,75,YELL	1	SNA	
...3	T0059	AA68-03184A	MANUAL FLYER-CARD-08;ALL MODEL,CHINESE,2	1	SNA	
...3	T0527	BN68-00513A	LABEL-E,PASS;ALL MODEL,YUPO(110G),50X15,	1	SNA	
...3		BN68-02186A	MANUAL FLYER-TOC GUIDE;COMM,SAMSUNG,11 L	1	SNA	
...3		BN68-02514A	MANUAL USERS;LC650&LC630,SAMSUNG,SC,CHIN	1	SNA	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
..2	ACCE2	BN96-13676A	ASSY ACCESSORY-CABLE;LA40C650L1FXXZ,LC65	1	SNA	
...3	T0268	3903-000082	CBF-POWER CORD;DT,CN,IP3/YES(A),3P_Lug,2	1	SA	
...3	T0524	6902-001107	BAG PE;LDPE,T0.05,W450,L400,TRP,0,3Separ	1	SNA	
...3	M9889	BN63-01798B	CLOTH-CLEAN;cloth,180,200,sea blue,ToC	1	SA	
...3	T0531	BN63-06339A	COVER-BOTTOM;37,40,46,LC650,HIPS,HB,BK00	1	SA	
...3	T0527	BN68-00513A	LABEL-E,PASS;ALL MODEL,YUPO(110G),50X15,	1	SNA	
...3		BN43-00004A	BATTERY;BM1L,BATTERY,MN,600mAh,7.9g	2	SNA	
...3		BN61-05596A	HOLDER-WIRE CABLE;LED TV,LDPE,T0.8,L150,	1	SNA	
...3	REMO2	BN59-01028A	REMOCON;TM1060,SAMSUNG,20PIN SINGLE,49KE	1	SA	
...3	M0254	AA59-00416A	ANT SHIELD BOX;UGC-AS-001A,PAL-BG,DK,I,M	1	SA	
0.1		BN92-06524B	ASSY P/MATERIAL;LC630 40	1	SNA	
..2	T0214	0203-001595	TAPE-OPP MASKING;OPP-2,0.075,75,800M,CLR	2.7	SNA	
..2		6902-000061	BAG AIR;LDPE,T0.2,W500,L1000,TRP,370.000	1	SNA	
..2		6902-000379	BAG AIR;LDPE,T0.2,W1000,L1800,TRP,1260.0	1	SNA	
..2		6902-000604	BAG WRAPPING;LDPE,T0.02,W500,L10000,TRP,	8.8	SNA	
..2		6902-000609	BAG ROLL;LDPE,T0.05,W2400,L1000,TRP,30.0	0.03	SNA	
..2	T0524	6902-001043	BAG PE;HDPE/NITRON,T0.015/T0.5,W1200,L80	1	SNA	
..2		6902-001178	BAG SHEET;HDPE/NITRON,T0.015/T01.0,W400,	1	SNA	
..2	M040	6922-000013	BAND PP;PP,W18,L2300m,TRP,21000g	1.3	SNA	
..2		BH69-00376D	PACKING PALLET-00;COMM,WOOD,1232,1032,12	1	SNA	
..2		BN68-02422B	LABEL-WARNING SHIPPING;ALL MODEL,A/P 100	1	SNA	
..2		BN69-00391P	PAD-ANGLE;OTHER,T4,50,2200,YEL	1	SNA	
..2	T0246	BN69-04325A	CUSHION-01,SET;LC650 40,EPS	1	SNA	

5. Exploded View & Part List

5-1. LA46C650L1F Exploded View



5-2. LA46C650L1F Parts List

Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
F001A	BN96-12753E	ASSY COVER P-FRONT;46,LC650,CHINA(DTV),P	1	SA	
INVER	BN81-04450A	A/S-BB-L;V460H1-LH7	1	SA	
M0014	BN94-03432A	ASSY PCB MAIN;LA32C650L1MXZK,LC650,N84A	1	SA	
M0027	BN96-12763A	ASSY STAND P-BASE;46,EXPORT,TEMPERED GLA	1	SA	
M0174	BN44-00341A	AC VSS(I)-TV;PSIV281510A,I46F1_ASM,14mA,	1	SA	
PANEL	BN07-00823A	LCD-PANEL;V460H1-LH7,CM46H17,10bits,46,1	1	SA	
R001A	BN96-12768W	ASSY COVER P-REAR;46,LC630,XZ(DTV),PCM,T	1	SA	
SG03A	BN96-12795D	ASSY STAND P-GUIDE;37,40,46,LC650,W/W,PC	1	SA	
T0101	BN61-05997A	BRACKET-WALL;LC650 46,SECC,T1.6	4	SNA	
T0175	BN96-12837B	ASSY SPEAKER P;6ohm,4pin,10W,L:630 R:290	1	SA	
T0910	BN96-13342A	ASSY BRACKET P-STAND LINK;LC530 37/40/46	1	SNA	
TCON	BN81-04460A	A/S-T CON V460H1-LH7;V460H1-LH7	1	SA	

5-2-1. LA46C650L1F Parts List

Service Bom (SA: SERVICE AVAILABLE, SNA: SERVICE NOT AVAILABLE)

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
0.1		BN90-02440E	ASSY COVER FRONT;LA46C650L1FXXZ	1	SNA	
..2	F001A	BN96-12753E	ASSY COVER P-FRONT;46,LC650,CHINA(DTV),P	1	SA	
...3	AB326	BN61-04661A	BRACKET-STOPPER;L650,SK-5,T0.4,Plating,H	4	SNA	
...3	F001	BN63-06333E	COVER-FRONT;46,LC650,CHINA(DTV),PMMA+PMM	1	SNA	
...3		BN64-01223A	DECORATION;40,LC650,PC,V2,RD0045(RED)	1	SNA	
...3		BN96-12757B	ASSY HOLDER P-BOSS BOTTOM;40,46,55,LC650	1	SNA	
...4		BN61-04731A	BOSS-TAPE;AMBER,ACRYL,T1.1,W8.0mm,WHITE	0.41	SNA	
...4		BN61-05983B	HOLDER-BOSS BOTTOM;40,46,55,LC650,ABS,HB	1	SNA	
...3		BN63-05940J	COVER-SHEET;PE,T0.08,720mm,200M,CLEAR,40	2	SNA	
...3		BN74-00052A	TAPE-PAPER;LB530,Crepe Paper,0.17mm, 10m	0.05	SNA	
...3	M0125	BN96-13226B	ASSY BOARD P-TOUCH FUNCTION&IR;LC650,129	1	SA	
...3		BN60-00163D	SPACER-FOAM;LC650-46",FOAM,590,0.5,25,Bo	2	SNA	
...3		BN60-00163J	SPACER-FOAM;LC650-46",FOAM,1024,T 0.5,20	1	SNA	
...3		BN60-00162E	SPACER-FOAM;FOAM,50000mm,Dark Gray,0.5T,	0.2	SNA	
..2	T0175	BN96-12837B	ASSY SPEAKER P;6ohm,4pin,10W,L:630 R:290	1	SA	
0.1	S001A	BN90-02444B	ASSY STAND;46,LC650,W/W,2COAT,ROSE BLACK	1	SNA	
..2	M0027	BN96-12763A	ASSY STAND P-BASE;46,EXPORT,TEMPERED GLA	1	SA	
...3	M0081	6003-001003	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	6	SA	
...3		BN61-04692A	BOSS-PRIMER;#94,clear,35cps	0.1	SNA	
...3		BN61-04731D	BOSS-TAPE;AMBER,ACRYL,T1.1,W20.0mm,WHITE	0.39	SNA	
...3		BN61-05244A	BRACKET-SWIVEL BOTTOM;LB700 46,HGI,T3.0	1	SNA	
...3		BN61-05493A	HOLDER-SWIVEL RING BOTTOM;LB650 40,Aceta	1	SNA	
...3		BN61-05826A	BOSS-BOND;#760,Poly urethane,Black	2.4	SNA	
...3	GSN01	BN61-05994A	GUIDE-STAND NECK;40,LC650,PETG,V2,TP0003	1	SNA	
...4		BN61-06079B	GUIDE-NECK-INSERT;LC650 40,PETG HB,TP000	1	SNA	
...3	CCM1	BN63-04755A	COVER-SHEET;AMBER,PE,T0.05,W150mm,200M,6	1.22	SNA	
...3		BN63-05227D	COVER-STAND GLASS;46,LC650,GLASS,T8.0,2C	1	SNA	
...3	T0527	BN68-01648B	LABEL WARNING;WW,PET,T0.05,40,25,EXPORT	1	SNA	
...3	M0126	BN73-00215A	RUBBER-FOOT;40LB650,RUBBER,15*25,60,4.0,	4	SNA	
...3	M0126	BN73-00217A	RUBBER-FOOT;LB650,RUBBER,DIA30,7.5,Dark	4	SNA	
...3		BN74-00031A	GREASE;kanto-kasei FL-955,grease,wht	0.4	SNA	
...3	FD01	BN63-06913A	COVER-DECORATION;LB7000 46,ABS+PMMA,HB,H	1	SNA	
...3		BN61-05652C	BRACKET-STAND BOTTOM;B650 40,SGCC,T2.0,V	1	SNA	
..2	SG03A	BN96-12795D	ASSY STAND P-GUIDE;37,40,46,LC650,W/W,PC	1	SA	
...3	T0920	BN61-06003A	GUIDE-STAND;37,40,46,LC650,PC+G/F,20%,V2	1	SNA	
...3		BN68-02766B	MANUAL FLYER-STAND GUIDE;L550~L750,SAMSU	1	SNA	
...3		BN96-12031G	ASSY ACCESSORY-SCREW;10 LCD-TV,6003-0010	1	SNA	
...4	M0081	6003-001003	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	9	SA	
...4	T0524	6902-000341	BAG PE;LDPE,T0.05,L90,W70,TRP,,,PE MARK	1	SNA	
...3	T0524	6902-001063	BAG PE;LDPE,T0.05,W180,L350,TRP,RECYCLE	1	SNA	
0.1	R001A	BN90-02449W	ASSY COVER REAR;LA46C650L1FXXZ	1	SNA	
..2	M0081	6003-001003	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	14	SA	
..2	R001A	BN96-12768W	ASSY COVER P-REAR;46,LC630,XZ(DTV),PCM,T	1	SA	
...3	R001	BN63-06337F	COVER-REAR;46,LC650,SO,PCM,T0.5,BLK	1	SNA	
...3		BN64-01270C	INLAY-AV;LC650,PS SHEET,T0.5,CO	1	SNA	
...3	T0139	BN65-00003A	CLAMPER BAG;42C7,LDPE,HB,BLK	1	SNA	
...3	T0071	BN64-01251C	INLAY-TERMINAL;LC650,PS SHEET,T0.5,CHINA	1	SNA	
...3	AH358	BN61-06545A	HOLDER-REAR;LC650 37/40/46,PP,BLK	1	SNA	

5. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...3		BN63-06630A	SHEET-INSULATOR SMPS;UC6100 40inch,PC,T0	1	SNA	
...3		BN60-00162C	SPACER-FOAM;FOAM,50000mm,Dark Gray,0.5T,	1.35	SNA	
0.1	M0017	BN91-05241A	ASSY CHASSIS;LC650,N84A	1	SNA	
.2	M0014	BN94-03432A	ASSY PCB MAIN;LA32C650L1MXZK,LC650,N84A	1	SA	
...3		3701-001480	CONNECTOR-DSUB;15P,3R,FEMAIL,STAMPED PIN	1	SA	
...3		3711-007302	HEADER-BOARD TO BOARD;BOX,18P,2R,2mm,ANG	1	SA	
...3	JA333	3722-002892	JACK-PIN;10P,Ni,R,W,R,B,G,STRAIGHT	1	SA	
...3		BN97-04222A	ASSY SMD;LA32C650L1MXZK,LC650,N84A	1	SNA	
...4	DS01A	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	18	SA	
...4		0403-001180	DIODE-ZENER;BZX84C6V2,5.8-6.6V,350mW,SOT	4	SA	
...4		0403-001783	DIODE-ZENER;BZB84-C6V2,5.8/6.6V,300mW,SO	16	SNA	
...4	D0254	0404-001404	DIODE-SCHOTTKY;BAT721C,40V,200mA,SOT-23,	4	SA	
...4	T0139	0406-001200	DIODE-TVS;RCLAMP0504F,6/-V,150W,SC-70	2	SA	
...4	T0139	0406-001271	DIODE-TVS;RCLAMP0524P,6/-V,150W,SLP251	9	SNA	
...4	Q101	0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	10	SA	
...4		0501-000669	TR-SMALL SIGNAL;KTA1505Y,PNP,150mW,SOT-2	2	SA	
...4	CEQ2	0505-000110	FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0.	1	SA	
...4	Q409	0505-000274	FET-SILICON;AO4435L,P,-30V,-11A,0.014ohm	1	SNA	
...4	IC104	0801-003330	IC-CMOS LOGIC;Octal buffer,DQFN,20P,4.5x	2	SA	
...4	IC106	1001-001573	IC-VIDEO SWITCH;Sii9287BCNUTR,QFN,72P,10	1	SNA	
...4		1006-001266	IC-LINE TRANSCEIVER;3232,TSSOP,16P,174MI	1	SA	
...4	IC112	1103-001310	IC-EEPROM;24LC02B,256X8BIT,SOIC,8P,3.91X	2	SNA	
...4	IC112	1103-001475	IC-EEPROM;M24256-BR,256Kbit,32Kx8,SOP,8P	1	SNA	
...4		1105-001931	IC-DDR2 SDRAM;K4T51163Q,DDR2-800,512Mbit	2	SA	
...4		1105-002058	IC-DDR2 SDRAM;K4T1G164QE-HCF8,DDR2,1Gbit	2	SA	
...4		1105-002075	IC-DDR2 SDRAM;K4T1G084QE-HCF8,DDR2,1Gbit	4	SA	
...4	T0085	1201-002487	IC-AUDIO AMP;MAX9728A,QFN,12P,3x3mm,DUAL	1	SA	
...4	T0124	1201-002992	IC-POWER AMP;STA369BWS,PSSO,36P,10.3x7.5	1	SA	
...4	T0087	1203-002519	IC-POSIFIXED REG.;KIA7809AF,DPAK,3P,240	1	SA	
...4	IC012	1203-003544	IC-POSIAJUST REG.;RT9173BPS,SOP-8,8P,5	1	SA	
...4		1203-004363	IC-VOL. DETECTOR;RT9818C-29PV,SOT-23,3P,	1	SA	
...4		1203-006012	IC-DC/DC CONVERTER;MP8725EL,QFN14,14P,3x	1	SA	
...4		1203-006017	IC-VOL. DETECTOR;RT9824GJ8,TSOT23,8P,2.9	1	SA	
...4		1203-006104	IC-DC/DC CONVERTER;MP8707EN,SOIC8E,8P,4.	4	SA	
...4	T0087	1203-006109	IC-POSIFIXED REG.;S-1206B33-M3T1G,SOT-2	1	SA	
...4	T0087	1203-006141	IC-POSIFIXED REG.;S-1172B33-U5T1G,SOT-8	3	SA	
...4		1203-006142	IC-DC/DC CONVERTER;BD8924G,5P,2.9x1.6x1.	1	SA	
...4		1203-006167	IC-POSIFIXED REG.;S-1172B12-U5T1G,SOT-8	1	SA	
...4	IC118	1204-003085	IC-VIDEO PROCESS;SDP91-PS,PBGA,496P,23x2	1	SA	
...4		1204-003100	IC-DECODER;SDP92,FCPBGAH,937P,35x35mm,PL	1	SA	
...4	IC118	1204-003101	IC-VIDEO PROCESS;SDP94,PBGA,345P,19x19mm	1	SNA	
...4		1205-003201	IC-BUS SWITCH;TC7WB125FK,SSOP,8P,2x2.3mm	1	SA	
...4		1205-003733	IC-SWITCH;AP2191MPG-13,MSOP-8L-EP,8P,2.9	1	SA	
...4		1205-003735	IC-SWITCH;AP2151WG-7,SOT25,5P,2.9x1.6mm,	1	SA	
...4		1205-003834	IC-ETHERNET CONTROLLER;RTL8201E-VC-GR,QF	1	SA	
...4		1205-003840	IC-CODEC;WM8595GEFL/RS,QFN,48P,7x7x0.9mm	1	SA	
...4		1405-001185	VARISTOR;24Vdc,1.6x0.8x0.36mm,TP	1	SA	
...4		1405-001233	VARISTOR;30Vdc,5A,1.6x0.8x0.8mm,TP	30	SA	
...4	MR604	2007-000137	R-CHIP;2Kohm,5%,1/16W,TP,1005	14	SNA	
...4	MR306	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,TP,1005	7	SNA	
...4	MR36	2007-000153	R-CHIP;22Kohm,5%,1/16W,TP,1005	4	SNA	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	AR43	2007-000155	R-CHIP;27Kohm,5%,1/16W,TP,1005	3	SNA	
....4	MR13	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	19	SNA	
....4	R509	2007-000170	R-CHIP;1Mohm,5%,1/16W,TP,1005	4	SNA	
....4	R111	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	62	SNA	
....4	HDR17	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	6	SNA	
....4	R338	2007-000173	R-CHIP;22ohm,5%,1/16W,TP,1005	35	SNA	
....4	UR23	2007-000174	R-CHIP;47ohm,5%,1/16W,TP,1005	4	SNA	
....4		2007-000231	R-CHIP;1.3Kohm,1%,1/10W,TP,1608	2	SA	
....4	MR39	2007-000242	R-CHIP;1.5Kohm,5%,1/16W,TP,1005	1	SNA	
....4	UR53	2007-000305	R-CHIP;10Mohm,5%,1/10W,TP,1608	1	SA	
....4	HR12	2007-000591	R-CHIP;22ohm,1%,1/10W,TP,1608	1	SNA	
....4		2007-000606	R-CHIP;240ohm,1%,1/10W,TP,1608	2	SA	
....4	JR11	2007-000614	R-CHIP;24Kohm,1%,1/10W,TP,1608	2	SNA	
....4	R945	2007-000726	R-CHIP;300ohm,1%,1/10W,TP,1608	1	SA	
....4	R19	2007-000763	R-CHIP;330ohm,1%,1/10W,TP,1608	1	SNA	
....4	R124	2007-000775	R-CHIP;33Kohm,5%,1/16W,TP,1005	1	SNA	
....4	OTR1	2007-001292	R-CHIP;33ohm,5%,1/16W,TP,1005	5	SNA	
....4		2007-001295	R-CHIP;39ohm,5%,1/16W,TP,1005	1	SA	
....4	CER07	2007-001308	R-CHIP;200ohm,5%,1/16W,TP,1005	1	SNA	
....4	R326	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,TP,1005	5	SNA	
....4		2007-001333	R-CHIP;18Kohm,5%,1/16W,TP,1005	3	SNA	
....4	PR24	2007-002970	R-CHIP;56ohm,5%,1/16W,TP,1005	6	SA	
....4		2007-003022	R-CHIP;62ohm,5%,1/16W,TP,1005	17	SNA	
....4		2007-007008	R-CHIP;300ohm,5%,1/16W,TP,1005	1	SNA	
....4	R365	2007-007107	R-CHIP;100Kohm,1%,1/16W,TP,1005	13	SNA	
....4		2007-007132	R-CHIP;15Kohm,1%,1/16W,TP,1005	1	SA	
....4		2007-007136	R-CHIP;4.7Kohm,1%,1/16W,TP,1005	61	SNA	
....4		2007-007137	R-CHIP;1.2Kohm,1%,1/16W,TP,1005	1	SA	
....4	DR4	2007-007142	R-CHIP;10Kohm,1%,1/16W,TP,1005	28	SNA	
....4		2007-007156	R-CHIP;1ohm,5%,1/16W,TP,1005	8	SNA	
....4		2007-007197	R-CHIP;3.3ohm,5%,1/16W,TP,1005	1	SNA	
....4		2007-007239	R-CHIP;31.6Kohm,1%,1/10W,TP,1608	1	SNA	
....4		2007-007306	R-CHIP;100ohm,1%,1/16W,TP,1005	43	SNA	
....4		2007-007309	R-CHIP;12Kohm,1%,1/16W,TP,1005	2	SA	
....4		2007-007318	R-CHIP;1Kohm,1%,1/16W,TP,1005	57	SNA	
....4		2007-007469	R-CHIP;110ohm,1%,1/16W,TP,1005	1	SNA	
....4	HDR44	2007-007470	R-CHIP;7.5Kohm,1%,1/16W,TP,1005	2	SNA	
....4		2007-007617	R-CHIP;2.49Kohm,1%,1/10W,TP,1608	1	SA	
....4		2007-007698	R-CHIP;5.1Kohm,1%,1/16W,TP,1005	3	SNA	
....4		2007-007724	R-CHIP;40.2ohm,1%,1/10W,TP,1608	2	SA	
....4		2007-007730	R-CHIP;6.8Mohm,1%,1/10W,TP,1608	1	SA	
....4		2007-007947	R-CHIP;36ohm,1%,1/10W,TP,1608	1	SA	
....4	MR11	2007-008015	R-CHIP;75ohm,1%,1/16W,TP,1005	18	SNA	
....4		2007-008134	R-CHIP;12.4Kohm,1%,1/16W,TP,1005	1	SC	
....4		2007-008263	R-CHIP;3Kohm,1%,1/16W,TP,1005	1	SNA	
....4		2007-008391	R-CHIP;6.34Kohm,1%,1/16W,TP,1005	1	SA	
....4		2007-008811	R-CHIP;1.5ohm,5%,1/16W,TP,1005	1	SNA	
....4		2007-009853	R-CHIP;1.6Kohm,1%,1/16W,TP,1005	1	SNA	
....4		2011-001015	R-NETWORK;1Kohm,5%,1/16W,L,CHIP,8P,TP,3.	4	SC	
....4	DAR09	2011-001262	R-NETWORK;22ohm,5%,1/16W,L,CHIP,8P,TP,2.	25	SA	
....4		2011-001264	R-NETWORK;10ohm,5%,1/16W,L,CHIP,8P,TP,2.	6	SNA	

5. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4		2011-001345	R-NETWORK;10Kohm,5%,1/16W,L,CHIP,8P,TP,2	1	SA	
....4	DRP29	2011-001396	R-NETWORK;4.7Kohm,5%,1/16W,L,CHIP,8P,TP,	1	SA	
....4		2011-001427	R-NETWORK;0ohm,5%,1/16W,L,CHIP,8P,TP,2.0	3	SNA	
....4		2011-001448	R-NETWORK;10ohm,5%,1/16W,L,4P,T,1010	16	SA	
....4		2011-001449	R-NETWORK;22ohm,5%,1/16W,L,4P,TP,1010	9	SA	
....4		2011-001497	R-NETWORK;470ohm,5%,1/16W,L,CHIP,4P,TP,1	1	SNA	
....4		2011-001585	R-NETWORK;47ohm,5%,1/16W,L,CHIP-V,4P,TP,	1	SNA	
....4		2011-001589	R-NETWORK;0ohm,5%,1/16W,L,CHIP-V,4P,TP,1	1	SNA	
....4	C24	2203-000041	C-CER,CHIP;0.01nF,0.25pF,50V,C0G,1608	1	SNA	
....4	AC1	2203-000125	C-CER,CHIP;1.2nF,10%,50V,X7R,TP,1608,-	4	SA	
....4	PC43	2203-000233	C-CER,CHIP;0.1nF,5%,50V,C0G,TP,1005	4	SA	
....4	DC54	2203-000278	C-CER,CHIP;.01nF,0.5pF,50V,C0G,TP,1005	2	SA	
....4	RC34	2203-000280	C-CER,CHIP;0.01nF,0.5pF,50V,C0G,1608	3	SA	
....4	C3	2203-000384	C-CER,CHIP;0.015nF,5%,50V,C0G,1608	2	SNA	
....4	C304	2203-000405	C-CER,CHIP;0.18nF,5%,50V,C0G,1608	1	SNA	
....4	MC302	2203-000425	C-CER,CHIP;.018nF,5%,50V,C0G,TP,1005	10	SA	
....4	C254	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,TP,1005	11	SA	
....4	V1233	2203-000575	C-CER,CHIP;220nF,10%,25V,X7R,TP,2012	6	SNA	
....4	ZC14	2203-000626	C-CER,CHIP;0.022nF,5%,50V,C0G,1608	1	SNA	
....4	AD480	2203-000679	C-CER,CHIP;0.027nF,5%,50V,C0G,1005	4	SNA	
....4	DC25	2203-000812	C-CER,CHIP;.033nF,5%,50V,C0G,1005	9	SA	
....4	CK40B	2203-000838	C-CER,CHIP;0.39NF,5%,50V,C0G,TP,1608	2	SNA	
....4	AD480	2203-000995	C-CER,CHIP;.047nF,5%,50V,C0G,TP,1005	2	SA	
....4	KAC5	2203-001126	C-CER,CHIP;0.68nF,10%,50V,X7R,1608	1	SNA	
....4	AD480	2203-001412	C-CER,CHIP;0.03nF,5%,50V,NP0,TP,1005	10	SNA	
....4	AD480	2203-001428	C-CER,CHIP;470nF,10%,50V,X7R,TP,2012	1	SNA	
....4	AD480	2203-001851	C-CER,CHIP;0.016nF,5%,50V,NP0,TP,1608	2	SNA	
....4	AD480	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	14	SNA	
....4	AVC08	2203-002398	C-CER,CHIP;22nF,10%,50V,X7R,1608	15	SNA	
....4	AD480	2203-002525	C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1005	2	SNA	
....4	AD480	2203-002720	C-CER,CHIP;10nF,10%,25V,X7R,TP,1005	4	SNA	
....4	DC108	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	3	SC	
....4	DC18	2203-005138	C-CER,CHIP;1.8nF,10%,50V,X7R,1005	6	SA	
....4	AAC1	2203-005249	C-CER,CHIP;100nF,10%,50V,X7R,TP,1608	16	SNA	
....4	AD480	2203-005344	C-CER,CHIP;22nF,10%,25V,X7R,TP,1005,-	23	SNA	
....4	AD480	2203-005533	C-CER,CHIP;1000nF,20%,6.3V,X7R,TP,1608	2	SNA	
....4	PC8	2203-005642	C-CER,CHIP;0.22nF,5%,50V,NP0,1005	1	SNA	
....4	AD480	2203-005968	C-CER,CHIP;4.7NF,10%,50V,X7R,TP,1005	2	SNA	
....4	VC37	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,TP,1005	2	SA	
....4	AD480	2203-006104	C-CER,CHIP;1000nF,10%,50V,X7R,3225	1	SA	
....4	AD480	2203-006126	C-CER,CHIP;47nF,10%,16V,X7R,1005	3	SNA	
....4	PC11	2203-006141	C-CER,CHIP;1000nF,10%,16V,X5R,1608	2	SNA	
....4	C102	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	321	SNA	
....4	AD480	2203-006307	C-CER,CHIP;1000nF,10%,25V,X5R,2012	11	SNA	
....4	AD480	2203-006333	C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216	10	SNA	
....4	AD480	2203-006336	C-CER,CHIP;10000nF,10%,25V,X5R,3216	7	SA	
....4	C125	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,TP,2012	29	SC	
....4	HE4	2203-006474	C-CER,CHIP;22000nF,20%,6.3V,X5R,2012	11	SA	
....4	HDC11	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,TP,1005	45	SNA	
....4	AD480	2203-006824	C-CER,CHIP;4700nF,10%,10V,X5R,1608	4	SNA	
....4	AD480	2203-006992	C-CER,CHIP;0.33nF,5%,50V,C0G,TP,1005	8	SNA	

5. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...4	AD480	2203-007176	C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012 (	2	SNA	
...4	AD480	2203-007233	C-CER,CHIP;22000nF,10%,16V,X5R,TP,3216	5	SA	
...4	AD480	2203-007270	C-CER,CHIP;10000nF,10%,10V,X5R,TP,1608	61	SNA	
...4	T0052	2703-000125	INDUCTOR-SMD;10uH,10%,2012	8	SA	
...4	T0052	2703-000158	INDUCTOR-SMD;1uH,10%,2012	9	SA	
...4	VL6	2703-000398	INDUCTOR-SMD;10uH,10%,3225	1	SA	
...4	T0052	2703-001239	INDUCTOR-SMD;3.3uH,10%,1608	3	SA	
...4	T0052	2703-002332	INDUCTOR-SMD;330nH,5%,1608	1	SA	
...4	T0052	2703-002557	INDUCTOR-SMD;270NH,5%,1608	1	SNA	
...4	T0052	2703-003150	INDUCTOR-SMD;4.7uH,20%,5050	4	SNA	
...4		2703-003296	INDUCTOR-SMD;47uH,10%,2012	1	SNA	
...4	T0052	2703-003362	INDUCTOR-SMD;4.7uH,20%,7070	1	SA	
...4	T0052	2703-003713	INDUCTOR-SMD;1.5uH,20%,7366	1	SA	
...4	X202	2801-003326	CRYSTAL-SMD;24MHz,30ppm,28-ABX,20pF,50oh	2	SA	
...4	X202	2801-003773	CRYSTAL-SMD;12MHz,30ppm,28-AAN,20pF,50oh	1	SA	
...4	X202	2801-003954	CRYSTAL-SMD;27MHz,30ppm,28-AAN,16pF,50oh	1	SA	
...4	X202	2801-004629	CRYSTAL-SMD;27MHz,20ppm,12pF,50ohm,TP	1	SNA	
...4	X202	2801-004734	CRYSTAL-SMD;25.000000MHz,20ppm,28-AAN,12	1	SA	
...4		2804-001878	OSCILLATOR-CLOCK;49.152MHz,50ppm,10TTL/1	1	SA	
...4	F103	2901-001506	FILTER-EMI SMD;5V,0.13A,0pF,2x1x0.5mm,TP	2	SA	
...4	DR32	3301-000314	BEAD-SMD;120ohm,1.6x0.8x0.8mm,-,-,-	2	SNA	
...4	T0568	3301-001236	BEAD-SMD;60ohm,1608	12	SNA	
...4	T0568	3301-001404	BEAD-SMD;30ohm,2012,TP,15.9OHM/30MHz	41	SA	
...4	T0568	3301-001526	BEAD-SMD;10ohm,1.6x0.8x0.8mm,1000mA,TP,,	20	SNA	
...4	T0568	3301-002039	BEAD-SMD;26ohm,1608,TP	9	SA	
...4	T0313	3404-001207	SWITCH-TACT;12V,50mA,160gf,6.2X6.2,SPST	1	SA	
...4		3701-001591	CONNECTOR-HDMI;19P,2ROW,FEMALE,SMD-S,AU	3	SNA	
...4	AC510	3708-002777	CONNECTOR-FPC/FFC/PIC;82P,0.5mm/0.75mm,S	1	SA	
...4	CON_US	3711-005616	HEADER-BOARD TO CABLE;BOX,10P,1R,2mm,SMD	1	SNA	
...4	HB01A	3711-007336	HEADER-BOARD TO CABLE;BOX,4P,1R,2.5mm,SM	1	SA	
...4		BN41-01437A	PCB MAIN;C650 CN,FR-4,4,1.2T,213*270,1	1	SNA	
...4		0202-001767	SOLDER-CREAM;LST-5710,D20~38,Sn-57Bi-1Ag	7.5	SNA	
...4		1001-000164	IC-ANALOG MULTIPLEX;74HC4052,CMOS,SOP,16	1	SA	
...4	IC012	1203-006138	IC-POS1.ADJUST REG.;AP1117DGZ-13-89,TO-2	1	SA	
...4		2007-000946	R-CHIP;47ohm,1%,1/10W,TP,1608	4	SA	
...4		2007-001335	R-CHIP;36Kohm,5%,1/16W,TP,1005	4	SA	
...4	T0052	2703-003790	INDUCTOR-SMD;4.7uH,20%,8080	3	SA	
...4		3701-001693	CONNECTOR-HDMI;19P,2ROW,FEMALE,SMD-A	1	SA	
...4	AD480	2203-005393	C-CER,CHIP;0.005nF,0.1pF,50V,NP0,TP,1005	1	SNA	
...4		BN97-04394A	ASSY MICOM;T-VALDEUS-3000,N84A,Sub LC650	1	SNA	
....5	IC520	0903-001651	IC-MICROCONTROLLER;61P802-RG480WT,LQFP,4	1	SNA	
...4		BN97-04396A	ASSY MICOM;T-VALDCNC-0024,N84A,LC650 CN,	1	SNA	
....5		1107-001868	IC-NAND FLASH;KFG8GH6U4M-AIB6,1GByte,512	1	SNA	
...3	ET01	BN40-00183A	TUNER;DNCS443VL161A(S),DTMB/PAL/NTSC,75o	1	SA	
...3	JA333	3722-003040	JACK-PIN;3P W/L,SN,BLK/YEL/WHT/RED,ANGLE	1	SA	
...3		0202-001608	SOLDER-WIRE FLUX;LFC7-107,D0.8,99.3Sn/0.	1	SNA	
...3	CN906	3707-001096	CONNECTOR-OPTICAL;STRAIGHT W/L,SPDIF	1	SA	
...3		3722-003037	JACK-USB;4P/1C W/L,AU/NI,BLK,ANGLE,A	2	SA	
...3	JA330	3722-003038	JACK-PHONE;7P/1C W/L,SN,BLK	2	SA	
...3		3722-003051	JACK-PIN;3P W/L,NI/SN,YEL/WHT/RED,STRAIG	1	SA	
...3		3722-003058	JACK-MODULAR;8P/8C W/L,Y,STRAIGHT,N,AU,1	1	SA	

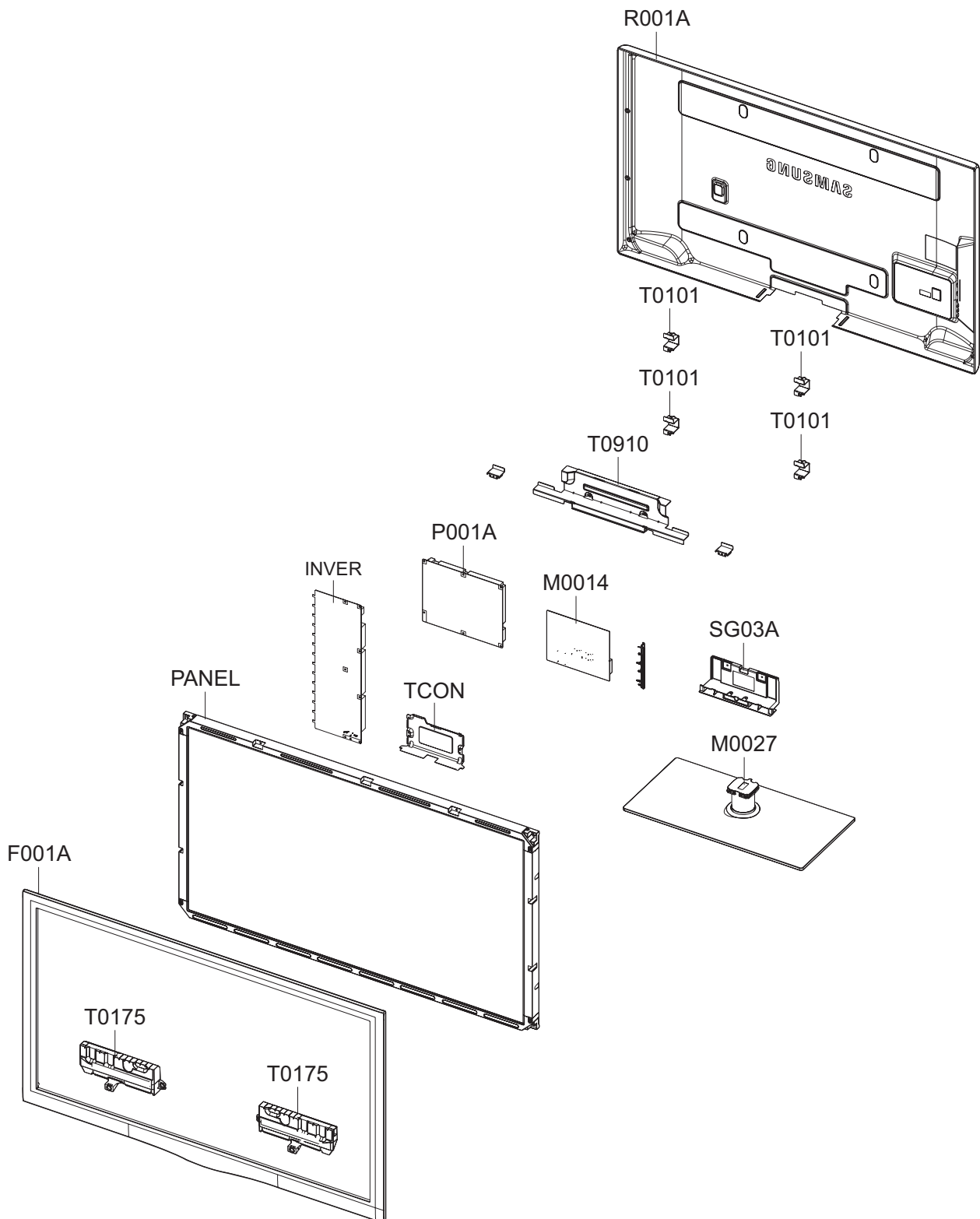
5. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...3	T0066	BN62-00071A	HEAT SINK-ES;22*22*2.5,Ceramic,T2.6,TAPE	1	SNA	
...3		BN62-00083A	HEAT SINK-ES;27*15.5*5,Ceramic,T5,TAPE	1	SNA	
...3		BN62-00084A	HEAT SINK-ES;LE32C650L1WXXC,A6063,2.5,28	1	SNA	
...3	T0066	BP62-00064B	HEAT SINK-ES;ROBOCOP,A6063,T4.0,40,40,BL	1	SNA	
0.1		BN91-05270A	ASSY LCD;BN07-00823A	1	SNA	
..2	PANEL	BN07-00823A	LCD-PANEL;V460H1-LH7,CM46H17,10bits,46,1	1	SA	
...3	INVER	BN81-04450A	A/S-BB-L;V460H1-LH7	1	SA	
...3	TCON	BN81-04460A	A/S-T CON V460H1-LH7;V460H1-LH7	1	SA	
0.1		BN91-05276J	ASSY SHIELD;LA46C650L1FXXZ	1	SNA	
..2	T0081	6001-002284	SCREW-MACHINE;BH,+,M4,L8,ZPC(WHT),SWRCH1	11	SA	
..2	M0081	6003-000337	SCREW-TAPTYPE;BH,+,S,M4,L10,ZPC(BLK),SWR	6	SA	
..2	M0081	6003-001003	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	6	SA	
..2	M0174	BN44-00341A	AC VSS(I)-TV;PSIV281510A,I46F1_ASM,14mA,	1	SA	
...3		BN81-04735A	A/S-FUSE;3.15A 250V,FM801S	1	SA	
...3		BN81-04738A	A/S-FUSE;6.3A 250V,FS801S	1	SA	
...3		BN81-04759A	A/S-MOSFET;FDPF16N50UT,MI801S, MI802S,BN	2	SA	
...3		BN81-04768A	A/S-MOSFET;SD14N60,QP801S, QP802S,BN44-0	2	SA	
...3		BN81-04786A	A/S-PWM CONTROL IC;STR-W6052S,UM801S	1	SA	
..2	M0230	BN96-12723D	ASSY CABLE P-FPCB LVDS CABLE;120Hz-46inc	1	SA	
..2	M0523	BN96-12974A	ASSY BRACKET P-WALL;46,52,55,LC650,SECC,	4	SNA	
...3	T0101	BN61-05997A	BRACKET-WALL;LC650 46,SECC,T1.6	4	SNA	
...3		BN60-00188A	SPACER-FOAM;LCD,FELT,20,3.0,30,Center :	4	SNA	
..2	T0910	BN96-13342A	ASSY BRACKET P-STAND LINK;LC530 37/40/46	1	SNA	
...3		BN61-02429K	STUD-PEM;PNB,M3.8,D7,L14.9,ZPC(SIL),SUM2	2	SNA	
...3	M0115	BN61-05998A	BRACKET-STAND LINK;LC650 46,SECC,T1.6	1	SNA	
...3		BN61-05281A	HOLDER-CLAMP;LCD,NYLON 66,WHT	3	SNA	
..2	T0081	6001-002604	SCREW-MACHINE;BH,+,M4,L10,ZPC(WHT),SWRCH	2	SA	
..2		BN61-06441A	HOLDER-INLET;LC530,ABS,V0	1	SNA	
..2	M2893	BN39-01024E	LEAD CONNECTOR;LC5F,UL3239#24,2P,175mm,1	1	SA	
..2	M2893	BN39-01279F	LEAD CONNECTOR;LN46C650L1FXZA,UL1061 #28	1	SA	
..2	CIS1	0203-001586	TAPE-FILAMENT;#893,0.15,25,55	0.32	SNA	
..2		BN73-00273B	SILICON/RUBBER-GAPPAD;UE32C6500,SILICON+	1	SNA	
..2		BN61-06559A	HOLDER-GROUND;LC550,SUS304,0.3	2	SNA	
..2		BN98-02767A	ASSY K/D-SHIELD AV;LA46C630K1F,N84A,DTV	1	SNA	
...3	M2893	BN39-01267F	LEAD CONNECTOR;LB6T,UL2651#26,18P,350mm,	1	SA	
...3		BN61-05990B	HOLDER-SIDE AV;40,LC650,ABS+PMMA,BK0007,	1	SNA	
0.1		BN92-05852G	ASSY BOX;46,LC650,CHINA	1	SNA	
..2		BN69-04656G	BOX-SET;46LC650-S,CB,A-01,DW2,ECT50,YEL,	1	SNA	
..2		BH68-00662A	LABEL BOX-00;ALL MODEL,MOJO 90G,60,110,W	1	SNA	
0.1		BN92-05947A	ASSY LABEL;LA46C630K1FXXZ,N84A	1	SNA	
..2	T0527	BP68-00052B	LABEL-00,RATING;CCTV,TETRON PAPER,T0.05,	1	SNA	
0.1	ACCE1	BN92-06012A	ASSY ACCESSORY;LA46C650L1FXXZ,LC650,N84A	1	SNA	
..2		BN96-13675A	ASSY ACCESSORY-MANUAL;LA40C650L1FXXZ,LC6	1	SNA	
...3	T0524	6902-000110	BAG PE;LDPE,T0.05,W250,L400,TRP,28,2,9.2	1	SNA	
...3	T0527	AA68-00764A	LABEL-PASSING;SAMSUNG ALL,ART PAPER,CLR,	1	SNA	
...3	T0527	AA68-02517A	LABEL;PJTV(TTSEC),COPPERPLATE,50,75,YELL	1	SNA	
...3	T0059	AA68-03184A	MANUAL FLYER-CARD-08;ALL MODEL,CHINESE,2	1	SNA	
...3	T0527	BN68-00513A	LABEL-E,PASS;ALL MODEL,YUPO(110G),50X15,	1	SNA	
...3		BN68-02186A	MANUAL FLYER-TOC GUIDE;COMM,SAMSUNG,11 L	1	SNA	
...3		BN68-02514A	MANUAL USERS;LC650&LC630,SAMSUNG,SC,CHIN	1	SNA	
..2	ACCE2	BN96-13892A	ASSY ACCESSORY-CABLE;LA46C650L1FXXZ,LC65	1	SNA	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...3	T0268	3903-000082	CBF-POWER CORD;DT,CN,IP3/YES(A),3P_Lug,2	1	SA	
...3	T0524	6902-001107	BAG PE;LDPE,T0.05,W450,L400,TRP,0,3Separ	1	SNA	
...3	M9889	BN63-01798B	CLOTH-CLEAN;cloth,180,200,sea blue,ToC	1	SA	
...3	T0531	BN63-06339A	COVER-BOTTOM;37,40,46,LC650,HIPS,HB,BK00	1	SA	
...3	T0527	BN68-00513A	LABEL-E,PASS;ALL MODEL,YUPO(110G),50X15,	1	SNA	
...3	T0010	BN96-08624A	ASSY HOLDER P;08 PDP MODEL,ABS HB,GRAY	1	SNA	
...4	T0010	BN61-04529A	HOLDER-RING;ABS, HB,GRAY	4	SNA	
...4		6902-000683	BAG ZIPPER;LDPE,T0.05,W60,L60,TRP,4-PE M	1	SNA	
...3		BN43-00004A	BATTERY;BM1L,BATTERY,MN,600mAh,7.9g	2	SNA	
...3		BN61-05596A	HOLDER-WIRE CABLE;LED TV,LDPE,T0.8,L150,	1	SNA	
...3	REMO2	BN59-01028A	REMOCON;TM1060,SAMSUNG,20PIN SINGLE,49KE	1	SA	
...3	M0254	AA59-00416A	ANT SHIELD BOX;UGC-AS-001A,PAL-BG,DK,I,M	1	SA	
0.1		BN92-06524H	ASSY P/MATERIAL;LC550 46	1	SNA	
..2	T0214	0203-001595	TAPE-OPP MASKING;OPP-2,0.075,75,800M,CLR	3.03	SNA	
..2		6902-000061	BAG AIR;LDPE,T0.2,W500,L1000,TRP,370.000	1	SNA	
..2		6902-000379	BAG AIR;LDPE,T0.2,W1000,L1800,TRP,1260.0	1	SNA	
..2		6902-000604	BAG WRAPPING;LDPE,T0.02,W500,L10000,TRP,	10.74	SNA	
..2		6902-000609	BAG ROLL;LDPE,T0.05,W2400,L1000,TRP,30.0	0.13	SNA	
..2		6902-001126	BAG SHEET;HDPE/NITRON,T0.015/T1.0,W500,L	1	SNA	
..2		6902-001183	BAG PE;HDPE/NITRON,T0.015/T0.5,W1300,L90	1	SNA	
..2	M040	6922-000013	BAND PP;PP,W18,L2300m,TRP,21000g	1.45	SNA	
..2	T0603	BH69-40303K	PACKING-00,PALLET;COMM,OTHER,1400,1120,1	1	SNA	
..2		BN68-02422B	LABEL-WARNING SHIPPING;ALL MODEL,A/P 100	1	SNA	
..2		BN69-00391E	PAD-ANGLE;DI19PS,B400 PAPER,T5,50,1500,Y	1	SNA	
..2	T0246	BN69-04339A	CUSHION-01,SET;46LC550/630/640/650/670-G	1	SNA	

5. Exploded View & Part List

5-1. LA55C650L1F Exploded View



5-2. LA55C650L1F Parts List

Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
F001A	BN96-12754E	ASSY COVER P-FRONT;55,LC650,CHINA(DTV),P	1	SA	
INVER	BN81-04446A	A/S-BB-L T546HW01 V0;T546HW01 V0	1	SA	
M0014	BN94-03432A	ASSY PCB MAIN;LA32C650L1MXZK,LC650,N84A	1	SA	
M0027	BN96-12764A	ASSY STAND P-BASE;55,EXPORT,TEMPERED GLA	1	SA	
P001A	BN44-00342A	AC VSS(I)-TV;PSIV361610A,I55F1_ASM,11.0m	1	SA	
PANEL	BN07-00834A	LCD-PANEL;T546HW01 V0,AU54H10,8bit,54.6,	1	SA	
R001A	BN96-12769J	ASSY COVER P-REAR;55,LC630,650,CHINA(DTV	1	SA	
SG03A	BN96-12760B	ASSY STAND P-GUIDE;55,LC650,W/W,PC+G/F,2	1	SA	
T0101	BN61-05997A	BRACKET-WALL;LC650 46,SECC,T1.6	4	SNA	
T0175	BN96-12838A	ASSY SPEAKER P;8ohm,4pin,15W,L:800 R:300	1	SA	
T0910	BN96-13343A	ASSY BRACKET P-STAND LINK;LC530 52/55,SE	1	SNA	
TCON	BN81-04415A	A/S-T CON T546HW01_V0;T546HW01 V0	1	SA	

5-2-1. LA55C650L1F Parts List

Service Bom (SA: SERVICE AVAILABLE, SNA: SERVICE NOT AVAILABLE)

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
0.1		BN90-02441E	ASSY COVER FRONT;LA55C650L1FXXZ	1	SNA	
..2	F001A	BN96-12754E	ASSY COVER P-FRONT;55,LC650,CHINA(DTV),P	1	SA	
...3	AB326	BN61-04661A	BRACKET-STOPPER;L650,SK-5,T0.4,Plating,H	4	SNA	
...3	F001	BN63-06334E	COVER-FRONT;55,LC650,CHINA(DTV),PMMA+PMM	1	SNA	
...3		BN64-01223A	DECORATION;40,LC650,PC,V2,RD0045(RED)	1	SNA	
...3		BN96-12757B	ASSY HOLDER P-BOSS BOTTOM;40,46,55,LC650	1	SNA	
...4		BN61-04731A	BOSS-TAPE;AMBER,ACRYL,T1.1,W8.0mm,WHITE	0.41	SNA	
...4		BN61-05983B	HOLDER-BOSS BOTTOM;40,46,55,LC650,ABS,HB	1	SNA	
...3		BN60-00162E	SPACER-FOAM;FOAM,50000mm,Dark Gray,0.5T,	0.2	SNA	
...3	CCM1	BN63-02183Q	COVER-SHEET;AMBER,PE,T0.08,845,200,CLEAR	2	SNA	
...3		BN60-00163E	SPACER-FOAM;LC650-55",FOAM,700,0.5,20,Bo	2	SNA	
...3		BN60-00163K	SPACER-FOAM;LC650-55",FOAM,1210,T 0.5,20	1	SNA	
...3		BN74-00052A	TAPE-PAPER;LB530,Crepe Paper,0.17mm, 10m	0.05	SNA	
...3	M0125	BN96-13226B	ASSY BOARD P-TOUCH FUNCTION&IR;LC650,129	1	SA	
..2	T0175	BN96-12838A	ASSY SPEAKER P;8ohm,4pin,15W,L:800 R:300	1	SA	
0.1	S001A	BN90-02445B	ASSY STAND;55,LC650,W/W,2COAT,ROSE BLACK	1	SNA	
..2	SG03A	BN96-12760B	ASSY STAND P-GUIDE;55,LC650,W/W,PC+G/F,2	1	SA	
...3	T0920	BN61-06004A	GUIDE-STAND;55,LC650,PC+G/F,20%,V2,BK000	1	SNA	
...3		BN68-02766B	MANUAL FLYER-STAND GUIDE;L550~L750,SAMSU	1	SNA	
...3		BN96-12031G	ASSY ACCESSORY-SCREW;10 LCD-TV,6003-0010	1	SNA	
...4	M0081	6003-001003	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	9	SA	
...4	T0524	6902-000341	BAG PE;LDPE,T0.05,L90,W70,TRP,,,PE MARK	1	SNA	
...3	T0524	6902-001063	BAG PE;LDPE,T0.05,W180,L350,TRP,RECYCLE	1	SNA	
..2	M0027	BN96-12764A	ASSY STAND P-BASE;55,EXPORT,TEMPERED GLA	1	SA	
...3	M0081	6003-001003	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	6	SA	
...3		BN61-04692A	BOSS-PRIMER;#94,clear,35cps	0.1	SNA	
...3		BN61-04731D	BOSS-TAPE;AMBER,ACRYL,T1.1,W20.0mm,WHITE	0.39	SNA	
...3		BN61-05244A	BRACKET-SWIVEL BOTTOM;LB700 46,HGI,T3.0	1	SNA	
...3		BN61-05255A	HOLDER-SWIVEL RING BOTTOM;LB700 46,POM H	1	SNA	
...3		BN61-05654A	BRACKET-STAND BOTTOM;B650 55,SECC,T3.0	1	SNA	
...3		BN61-05826A	BOSS-BOND;#760,Poly urethane,Black	2.4	SNA	
...3	GSN01	BN61-05994A	GUIDE-STAND NECK;40,LC650,PETG,V2,TP0003	1	SNA	
...4		BN61-06079B	GUIDE-NECK-INSERT;LC650 40,PETG HB,TP000	1	SNA	
...3	CCM1	BN63-04755A	COVER-SHEET;AMBER,PE,T0.05,W150mm,200M,6	1.1	SNA	
...3		BN63-05766D	COVER-STAND GLASS;55,LC650,GLASS,T8.0,2C	1	SNA	
...3	T0527	BN68-01648B	LABEL WARNING;WW,PET,T0.05,40,25,EXPORT	1	SNA	
...3	M0126	BN73-00217A	RUBBER-FOOT;LB650,RUBBER,DIA30,7.5,Dark	4	SNA	
...3		BN74-00031A	GREASE;kanto-kasei FL-955,grease,wht	0.4	SNA	
...3	FD01	BN63-06913A	COVER-DECORATION;LB7000 46,ABS+PMMA,HB,H	1	SNA	
...3		BN73-00215B	RUBBER-FOOT;40LC650,RUBBER,15*25,60,2.5,	4	SNA	
0.1	R001A	BN90-02450J	ASSY COVER REAR;55,LC650	1	SNA	
..2	M0081	6003-001003	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	14	SA	
..2	R001A	BN96-12769J	ASSY COVER P-REAR;55,LC630,650,CHINA(DTV	1	SA	
...3	R001	BN63-06338F	COVER-REAR;55,LC650,SO,PCM,T0.5,BLK,CHIN	1	SNA	
...3	T0071	BN64-01251C	INLAY-TERMINAL;LC650,PS SHEET,T0.5,CHINA	1	SNA	
...3		BN64-01270C	INLAY-AV;LC650,PS SHEET,T0.5,CO	1	SNA	
...3	T0139	BN65-00003A	CLAMPER BAG;42C7,LDPE,HB,BLK	1	SNA	
...3	AH358	BN61-06546A	HOLDER-REAR;LC650 55,PP,BLK	1	SNA	

5. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...3		BN63-06630A	SHEET-INSULATOR SMPS;UC6100 40inch,PC,T0	1	SNA	
...3		BN60-00162C	SPACER-FOAM;FOAM,50000mm,Dark Gray,0.5T,	1.53	SNA	
0.1		BN91-05225A	ASSY LCD;BN07-00834A	1	SNA	
..2	PANEL	BN07-00834A	LCD-PANEL;T546HW01 V0,AU54H10,8bit,54.6,	1	SA	
...3	TCON	BN81-04415A	A/S-T CON T546HW01_V0;T546HW01 V0	1	SA	
...3	INVER	BN81-04446A	A/S-BB-L T546HW01 V0;T546HW01 V0	1	SA	
0.1	M0017	BN91-05241A	ASSY CHASSIS;LC650,N84A	1	SNA	
..2	M0014	BN94-03432A	ASSY PCB MAIN;LA32C650L1MXZK,LC650,N84A	1	SA	
...3		3701-001480	CONNECTOR-DSUB;15P,3R,FEMAIL,STAMPED PIN	1	SA	
...3		3711-007302	HEADER-BOARD TO BOARD;BOX,18P,2R,2mm,ANG	1	SA	
...3	JA333	3722-002892	JACK-PIN;10P,Ni,R,W,R,B,G,STRAIGHT	1	SA	
...3		BN97-04222A	ASSY SMD;LA32C650L1MXZK,LC650,N84A	1	SNA	
....4	DS01A	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	18	SA	
....4		0403-001180	DIODE-ZENER;BZX84C6V2,5.8-6.6V,350mW,SOT	4	SA	
....4		0403-001783	DIODE-ZENER;BZB84-C6V2,5.8/6.6V,300mW,SO	16	SNA	
....4	D0254	0404-001404	DIODE-SCHOTTKY;BAT721C,40V,200mA,SOT-23,	4	SA	
....4	T0139	0406-001200	DIODE-TVS;RCLAMP0504F,6/-V,150W,SC-70	2	SA	
....4	T0139	0406-001271	DIODE-TVS;RCLAMP0524P,6/-V,150W,SLP251	9	SNA	
....4	Q101	0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	10	SA	
....4		0501-000669	TR-SMALL SIGNAL;KTA1505Y,PNP,150mW,SOT-2	2	SA	
....4	CEQ2	0505-000110	FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0.	1	SA	
....4	Q409	0505-000274	FET-SILICON;AO4435L,P,-30V,-11A,0.014ohm	1	SNA	
....4	IC104	0801-003330	IC-CMOS LOGIC;Octal buffer,DQFN,20P,4.5x	2	SA	
....4	IC106	1001-001573	IC-VIDEO SWITCH;Sil9287BCNUTR,QFN,72P,10	1	SNA	
....4		1006-001266	IC-LINE TRANSCEIVER;3232,TSSOP,16P,174mI	1	SA	
....4	IC112	1103-001310	IC-EEPROM;24LC02B,256X8BIT,SOIC,8P,3.91X	2	SNA	
....4	IC112	1103-001475	IC-EEPROM;M24256-BR,256Kbit,32Kx8,SOP,8P	1	SNA	
....4		1105-001931	IC-DDR2 SDRAM;K4T51163Q,DDR2-800,512Mbit	2	SA	
....4		1105-002058	IC-DDR2 SDRAM;K4T1G164QE-HCF8,DDR2,1Gbit	2	SA	
....4		1105-002075	IC-DDR2 SDRAM;K4T1G084QE-HCF8,DDR2,1Gbit	4	SA	
....4	T0085	1201-002487	IC-AUDIO AMP;MAX9728A,QFN,12P,3x3mm,DUAL	1	SA	
....4	T0124	1201-002992	IC-POWER AMP;STA369BWS,PSSO,36P,10.3x7.5	1	SA	
....4	T0087	1203-002519	IC-POSIFIXED REG.;KIA7809AF,DPAK,3P,240	1	SA	
....4	IC012	1203-003544	IC-POSIAJUST REG.;RT9173BPS,SOP-8,8P,5	1	SA	
....4		1203-004363	IC-VOL. DETECTOR;RT9818C-29PV,SOT-23,3P,	1	SA	
....4		1203-006012	IC-DC/DC CONVERTER;MP8725EL,QFN14,14P,3x	1	SA	
....4		1203-006017	IC-VOL. DETECTOR;RT9824GJ8,TSOT23,8P,2.9	1	SA	
....4		1203-006104	IC-DC/DC CONVERTER;MP8707EN,SOIC8E,8P,4.	4	SA	
....4	T0087	1203-006109	IC-POSIFIXED REG.;S-1206B33-M3T1G,SOT-2	1	SA	
....4	T0087	1203-006141	IC-POSIFIXED REG.;S-1172B33-U5T1G,SOT-8	3	SA	
....4		1203-006142	IC-DC/DC CONVERTER;BD8924G,5P,2.9x1.6x1.	1	SA	
....4		1203-006167	IC-POSIFIXED REG.;S-1172B12-U5T1G,SOT-8	1	SA	
....4	IC118	1204-003085	IC-VIDEO PROCESS;SDP91-PS,PBGA,496P,23x2	1	SA	
....4		1204-003100	IC-DECODER;SDP92,FCPBGAH,937P,35x35mm,PL	1	SA	
....4	IC118	1204-003101	IC-VIDEO PROCESS;SDP94,PBGA,345P,19x19mm	1	SNA	
....4		1205-003201	IC-BUS SWITCH;TC7WB125FK,SSOP,8P,2x2.3mm	1	SA	
....4		1205-003733	IC-SWITCH;AP2191MPG-13,MSOP-8L-EP,8P,2.9	1	SA	
....4		1205-003735	IC-SWITCH;AP2151WG-7,SOT25,5P,2.9x1.6mm,	1	SA	
....4		1205-003834	IC-ETHERNET CONTROLLER;RTL8201E-VC-GR,QF	1	SA	
....4		1205-003840	IC-CODEC;WM8595GEFL/RS,QFN,48P,7x7x0.9mm	1	SA	
....4		1405-001185	VARISTOR;24Vdc,1.6x0.8x0.36mm,TP	1	SA	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4		1405-001233	VARISTOR;30Vdc,5A,1.6x0.8x0.8mm,TP	30	SA	
....4	MR604	2007-000137	R-CHIP;2Kohm,5%,1/16W,TP,1005	14	SNA	
....4	MR306	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,TP,1005	7	SNA	
....4	MR36	2007-000153	R-CHIP;22Kohm,5%,1/16W,TP,1005	4	SNA	
....4	AR43	2007-000155	R-CHIP;27Kohm,5%,1/16W,TP,1005	3	SNA	
....4	MR13	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	19	SNA	
....4	R509	2007-000170	R-CHIP;1Mohm,5%,1/16W,TP,1005	4	SNA	
....4	R111	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	62	SNA	
....4	HDR17	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	6	SNA	
....4	R338	2007-000173	R-CHIP;22ohm,5%,1/16W,TP,1005	35	SNA	
....4	UR23	2007-000174	R-CHIP;47ohm,5%,1/16W,TP,1005	4	SNA	
....4		2007-000231	R-CHIP;1.3Kohm,1%,1/10W,TP,1608	2	SA	
....4	MR39	2007-000242	R-CHIP;1.5Kohm,5%,1/16W,TP,1005	1	SNA	
....4	UR53	2007-000305	R-CHIP;10Mohm,5%,1/10W,TP,1608	1	SA	
....4	HR12	2007-000591	R-CHIP;22ohm,1%,1/10W,TP,1608	1	SNA	
....4		2007-000606	R-CHIP;240ohm,1%,1/10W,TP,1608	2	SA	
....4	JR11	2007-000614	R-CHIP;24Kohm,1%,1/10W,TP,1608	2	SNA	
....4	R945	2007-000726	R-CHIP;300ohm,1%,1/10W,TP,1608	1	SA	
....4	R19	2007-000763	R-CHIP;330ohm,1%,1/10W,TP,1608	1	SNA	
....4	R124	2007-000775	R-CHIP;33Kohm,5%,1/16W,TP,1005	1	SNA	
....4	OTR1	2007-001292	R-CHIP;33ohm,5%,1/16W,TP,1005	5	SNA	
....4		2007-001295	R-CHIP;39ohm,5%,1/16W,TP,1005	1	SA	
....4	CER07	2007-001308	R-CHIP;200ohm,5%,1/16W,TP,1005	1	SNA	
....4	R326	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,TP,1005	5	SNA	
....4		2007-001333	R-CHIP;18Kohm,5%,1/16W,TP,1005	3	SNA	
....4	PR24	2007-002970	R-CHIP;56ohm,5%,1/16W,TP,1005	6	SA	
....4		2007-003022	R-CHIP;62ohm,5%,1/16W,TP,1005	17	SNA	
....4		2007-007008	R-CHIP;300ohm,5%,1/16W,TP,1005	1	SNA	
....4	R365	2007-007107	R-CHIP;100Kohm,1%,1/16W,TP,1005	13	SNA	
....4		2007-007132	R-CHIP;15Kohm,1%,1/16W,TP,1005	1	SA	
....4		2007-007136	R-CHIP;4.7Kohm,1%,1/16W,TP,1005	61	SNA	
....4		2007-007137	R-CHIP;1.2Kohm,1%,1/16W,TP,1005	1	SA	
....4	DR4	2007-007142	R-CHIP;10Kohm,1%,1/16W,TP,1005	28	SNA	
....4		2007-007156	R-CHIP;1ohm,5%,1/16W,TP,1005	8	SNA	
....4		2007-007197	R-CHIP;3.3ohm,5%,1/16W,TP,1005	1	SNA	
....4		2007-007239	R-CHIP;31.6Kohm,1%,1/10W,TP,1608	1	SNA	
....4		2007-007306	R-CHIP;100ohm,1%,1/16W,TP,1005	43	SNA	
....4		2007-007309	R-CHIP;12Kohm,1%,1/16W,TP,1005	2	SA	
....4		2007-007318	R-CHIP;1Kohm,1%,1/16W,TP,1005	57	SNA	
....4		2007-007469	R-CHIP;110ohm,1%,1/16W,TP,1005	1	SNA	
....4	HDR44	2007-007470	R-CHIP;7.5Kohm,1%,1/16W,TP,1005	2	SNA	
....4		2007-007617	R-CHIP;2.49Kohm,1%,1/10W,TP,1608	1	SA	
....4		2007-007698	R-CHIP;5.1Kohm,1%,1/16W,TP,1005	3	SNA	
....4		2007-007724	R-CHIP;40.2ohm,1%,1/10W,TP,1608	2	SA	
....4		2007-007730	R-CHIP;6.8Mohm,1%,1/10W,TP,1608	1	SA	
....4		2007-007947	R-CHIP;36ohm,1%,1/10W,TP,1608	1	SA	
....4	MR11	2007-008015	R-CHIP;75ohm,1%,1/16W,TP,1005	18	SNA	
....4		2007-008134	R-CHIP;12.4Kohm,1%,1/16W,TP,1005	1	SC	
....4		2007-008263	R-CHIP;3Kohm,1%,1/16W,TP,1005	1	SNA	
....4		2007-008391	R-CHIP;6.34Kohm,1%,1/16W,TP,1005	1	SA	
....4		2007-008811	R-CHIP;1.5ohm,5%,1/16W,TP,1005	1	SNA	

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Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4		2007-009853	R-CHIP;1.6Kohm,1%,1/16W,TP,1005	1	SNA	
....4		2011-001015	R-NETWORK;1Kohm,5%,1/16W,L,CHIP,8P,TP,3.	4	SC	
....4	DAR09	2011-001262	R-NETWORK;22ohm,5%,1/16W,L,CHIP,8P,TP,2.	25	SA	
....4		2011-001264	R-NETWORK;10ohm,5%,1/16W,L,CHIP,8P,TP,2.	6	SNA	
....4		2011-001345	R-NETWORK;10Kohm,5%,1/16W,L,CHIP,8P,TP,2	1	SA	
....4	DRP29	2011-001396	R-NETWORK;4.7Kohm,5%,1/16W,L,CHIP,8P,TP,	1	SA	
....4		2011-001427	R-NETWORK;0ohm,5%,1/16W,L,CHIP,8P,TP,2.0	3	SNA	
....4		2011-001448	R-NETWORK;10ohm,5%,1/16W,L,4P,T,1010	16	SA	
....4		2011-001449	R-NETWORK;22ohm,5%,1/16W,L,4P,TP,1010	9	SA	
....4		2011-001497	R-NETWORK;470ohm,5%,1/16W,L,CHIP,4P,TP,1	1	SNA	
....4		2011-001585	R-NETWORK;47ohm,5%,1/16W,L,CHIP-V,4P,TP,	1	SNA	
....4		2011-001589	R-NETWORK;0ohm,5%,1/16W,L,CHIP-V,4P,TP,1	1	SNA	
....4	C24	2203-000041	C-CER,CHIP;0.01nF,0.25pF,50V,C0G,1608	1	SNA	
....4	AC1	2203-000125	C-CER,CHIP;1.2nF,10%,50V,X7R,TP,1608,-	4	SA	
....4	PC43	2203-000233	C-CER,CHIP;0.1nF,5%,50V,C0G,TP,1005	4	SA	
....4	DC54	2203-000278	C-CER,CHIP;.01nF,0.5pF,50V,C0G,TP,1005	2	SA	
....4	RC34	2203-000280	C-CER,CHIP;0.01nF,0.5pF,50V,C0G,1608	3	SA	
....4	C3	2203-000384	C-CER,CHIP;0.015nF,5%,50V,C0G,1608	2	SNA	
....4	C304	2203-000405	C-CER,CHIP;0.18nF,5%,50V,C0G,1608	1	SNA	
....4	MC302	2203-000425	C-CER,CHIP;.018nF,5%,50V,C0G,TP,1005	10	SA	
....4	C254	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,TP,1005	11	SA	
....4	V1233	2203-000575	C-CER,CHIP;220nF,10%,25V,X7R,TP,2012	6	SNA	
....4	ZC14	2203-000626	C-CER,CHIP;0.022nF,5%,50V,C0G,1608	1	SNA	
....4	AD480	2203-000679	C-CER,CHIP;0.027nF,5%,50V,C0G,1005	4	SNA	
....4	DC25	2203-000812	C-CER,CHIP;.033nF,5%,50V,C0G,1005	9	SA	
....4	CK40B	2203-000838	C-CER,CHIP;0.39nF,5%,50V,C0G,TP,1608	2	SNA	
....4	AD480	2203-000995	C-CER,CHIP;.047nF,5%,50V,C0G,TP,1005	2	SA	
....4	KAC5	2203-001126	C-CER,CHIP;0.68nF,10%,50V,X7R,1608	1	SNA	
....4	AD480	2203-001412	C-CER,CHIP;0.03nF,5%,50V,NP0,TP,1005	10	SNA	
....4	AD480	2203-001428	C-CER,CHIP;470nF,10%,50V,X7R,TP,2012	1	SNA	
....4	AD480	2203-001851	C-CER,CHIP;0.016nF,5%,50V,NP0,TP,1608	2	SNA	
....4	AD480	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	14	SNA	
....4	AVC08	2203-002398	C-CER,CHIP;22nF,10%,50V,X7R,1608	15	SNA	
....4	AD480	2203-002525	C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1005	2	SNA	
....4	AD480	2203-002720	C-CER,CHIP;10nF,10%,25V,X7R,TP,1005	4	SNA	
....4	DC108	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	3	SC	
....4	DC18	2203-005138	C-CER,CHIP;1.8nF,10%,50V,X7R,1005	6	SA	
....4	AAC1	2203-005249	C-CER,CHIP;100nF,10%,50V,X7R,TP,1608	16	SNA	
....4	AD480	2203-005344	C-CER,CHIP;22nF,10%,25V,X7R,TP,1005,-	23	SNA	
....4	AD480	2203-005533	C-CER,CHIP;1000nF,20%,6.3V,X7R,TP,1608	2	SNA	
....4	PC8	2203-005642	C-CER,CHIP;0.22nF,5%,50V,NP0,1005	1	SNA	
....4	AD480	2203-005968	C-CER,CHIP;4.7nF,10%,50V,X7R,TP,1005	2	SNA	
....4	VC37	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,TP,1005	2	SA	
....4	AD480	2203-006104	C-CER,CHIP;1000nF,10%,50V,X7R,3225	1	SA	
....4	AD480	2203-006126	C-CER,CHIP;47nF,10%,16V,X7R,1005	3	SNA	
....4	PC11	2203-006141	C-CER,CHIP;1000nF,10%,16V,X5R,1608	2	SNA	
....4	C102	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	321	SNA	
....4	AD480	2203-006307	C-CER,CHIP;1000nF,10%,25V,X5R,2012	11	SNA	
....4	AD480	2203-006333	C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216	10	SNA	
....4	AD480	2203-006336	C-CER,CHIP;10000nF,10%,25V,X5R,3216	7	SA	
....4	C125	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,TP,2012	29	SC	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	HE4	2203-006474	C-CER,CHIP;22000nF,20%,6.3V,X5R,2012	11	SA	
....4	HDC11	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,TP,1005	45	SNA	
....4	AD480	2203-006824	C-CER,CHIP;4700nF,10%,10V,X5R,1608	4	SNA	
....4	AD480	2203-006992	C-CER,CHIP;0.33nF,5%,50V,C0G,TP,1005	8	SNA	
....4	AD480	2203-007176	C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012 (	2	SNA	
....4	AD480	2203-007233	C-CER,CHIP;22000nF,10%,16V,X5R,TP,3216	5	SA	
....4	AD480	2203-007270	C-CER,CHIP;10000nF,10%,10V,X5R,TP,1608	61	SNA	
....4	T0052	2703-000125	INDUCTOR-SMD;10uH,10%,2012	8	SA	
....4	T0052	2703-000158	INDUCTOR-SMD;1uH,10%,2012	9	SA	
....4	VL6	2703-000398	INDUCTOR-SMD;10uH,10%,3225	1	SA	
....4	T0052	2703-001239	INDUCTOR-SMD;3.3uH,10%,1608	3	SA	
....4	T0052	2703-002332	INDUCTOR-SMD;330nH,5%,1608	1	SA	
....4	T0052	2703-002557	INDUCTOR-SMD;270NH,5%,1608	1	SNA	
....4	T0052	2703-003150	INDUCTOR-SMD;4.7uH,20%,5050	4	SNA	
....4		2703-003296	INDUCTOR-SMD;47uH,10%,2012	1	SNA	
....4	T0052	2703-003362	INDUCTOR-SMD;4.7uH,20%,7070	1	SA	
....4	T0052	2703-003713	INDUCTOR-SMD;1.5uH,20%,7366	1	SA	
....4	X202	2801-003326	CRYSTAL-SMD;24MHz,30ppm,28-ABX,20pF,50oh	2	SA	
....4	X202	2801-003773	CRYSTAL-SMD;12MHz,30ppm,28-AAN,20pF,50oh	1	SA	
....4	X202	2801-003954	CRYSTAL-SMD;27MHz,30ppm,28-AAN,16pF,50oh	1	SA	
....4	X202	2801-004629	CRYSTAL-SMD;27MHz,20ppm,12pF,50ohm,TP	1	SNA	
....4	X202	2801-004734	CRYSTAL-SMD;25.000000MHz,20ppm,28-AAN,12	1	SA	
....4		2804-001878	OSCILLATOR-CLOCK;49.152MHz,50ppm,10TTL/1	1	SA	
....4	F103	2901-001506	FILTER-EMI SMD;5V,0.13A,0pF,2x1x0.5mm,TP	2	SA	
....4	DR32	3301-000314	BEAD-SMD;120ohm,1.6x0.8x0.8mm,-,-,-	2	SNA	
....4	T0568	3301-001236	BEAD-SMD;60ohm,1608	12	SNA	
....4	T0568	3301-001404	BEAD-SMD;30ohm,2012,TP,15.9OHM/30MHz	41	SA	
....4	T0568	3301-001526	BEAD-SMD;10ohm,1.6x0.8x0.8mm,1000mA,TP,,	20	SNA	
....4	T0568	3301-002039	BEAD-SMD;26ohm,1608,TP	9	SA	
....4	T0313	3404-001207	SWITCH-TACT;12V,50mA,160gf,6.2X6.2,SPST	1	SA	
....4		3701-001591	CONNECTOR-HDMI;19P,2ROW,FEMALE,SMD-S,AU	3	SNA	
....4	AC510	3708-002777	CONNECTOR-FPC/FFC/PIC;82P,0.5mm/0.75mm,S	1	SA	
....4	CON_US	3711-005616	HEADER-BOARD TO CABLE;BOX,10P,1R,2mm,SMD	1	SNA	
....4	HB01A	3711-007336	HEADER-BOARD TO CABLE;BOX,4P,1R,2.5mm,SM	1	SA	
....4		BN41-01437A	PCB MAIN;C650 CN,FR-4,4,1.2T,213*270,1	1	SNA	
....4		0202-001767	SOLDER-CREAM;LST-5710,D20~38,Sn-57Bi-1Ag	7.5	SNA	
....4		1001-000164	IC-ANALOG MULTIPLEX;74HC4052,CMOS,SOP,16	1	SA	
....4	IC012	1203-006138	IC-POS.ADJUST REG.;AP1117DGZ-13-89,TO-2	1	SA	
....4		2007-000946	R-CHIP;47ohm,1%,1/10W,TP,1608	4	SA	
....4		2007-001335	R-CHIP;36Kohm,5%,1/16W,TP,1005	4	SA	
....4	T0052	2703-003790	INDUCTOR-SMD;4.7uH,20%,8080	3	SA	
....4		3701-001693	CONNECTOR-HDMI;19P,2ROW,FEMALE,SMD-A	1	SA	
....4	AD480	2203-005393	C-CER,CHIP;0.005nF,0.1pF,50V,NP0,TP,1005	1	SNA	
....4		BN97-04394A	ASSY MICOM;T-VALDEUS-3000,N84A,Sub LC650	1	SNA	
.....5	IC520	0903-001651	IC-MICROCONTROLLER;61P802-RG480WT,LQFP,4	1	SNA	
....4		BN97-04396A	ASSY MICOM;T-VALDCNC-0024,N84A,LC650 CN,	1	SNA	
.....5		1107-001868	IC-NAND FLASH;KFG8GH6U4M-AIB6,1GByte,512	1	SNA	
...3	ET01	BN40-00183A	TUNER;DNCS443VL161A(S),DTMB/PAL/NTSC,75o	1	SA	
...3	JA333	3722-003040	JACK-PIN;3P W/L,SN,BLK/YEL/WHT/RED,ANGLE	1	SA	
...3		0202-001608	SOLDER-WIRE FLUX;LFC7-107,D0.8,99.3Sn/0.	1	SNA	
...3	CN906	3707-001096	CONNECTOR-OPTICAL;STRAIGHT W/L,SPDIF	1	SA	

5. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...3		3722-003037	JACK-USB;4P/1C W/L,AU/NI,BLK,ANGLE,A	2	SA	
...3	JA330	3722-003038	JACK-PHONE;7P/1C W/L,SN,BLK	2	SA	
...3		3722-003051	JACK-PIN;3P W/L,NI/SN,YEL/WHT/RED,STRAIG	1	SA	
...3		3722-003058	JACK-MODULAR;8P/8C W/L,Y,STRAIGHT,N,AU,1	1	SA	
...3	T0066	BN62-00071A	HEAT SINK-ES;22*22*2.5,Ceramic,T2.6,TAPE	1	SNA	
...3		BN62-00083A	HEAT SINK-ES;27*15.5*5,Ceramic,T5,TAPE	1	SNA	
...3		BN62-00084A	HEAT SINK-ES;LE32C650L1WXXC,A6063,2.5,28	1	SNA	
...3	T0066	BP62-00064B	HEAT SINK-ES;ROBOCOP,A6063,T4.0,40,40,BL	1	SNA	
0.1		BN92-05853J	ASSY BOX;55,LC650,China	1	SNA	
..2		BN69-04675E	BOX-SET OUT;55LC650U-S,CB,C3,DW3,YEL,W15	1	SNA	
..2		BN69-04668A	BOX-01,SET IN;55LC550-S,CB,C1,DW1,YEL,W1	1	SNA	
..2		BH68-00662A	LABEL BOX-00;ALL MODEL,MOJO 90G,60,110,W	1	SNA	
0.1		BN92-05858A	ASSY P/MATERIAL;55,LC650	1	SNA	
..2	T0214	0203-001269	TAPE-OPP MASKING;#301,T0.06,W75,L50000,N	0.84	SNA	
..2	T0214	0203-001595	TAPE-OPP MASKING;OPP-2,0.075,75,800M,CLR	1.74	SNA	
..2		6902-000061	BAG AIR;LDPE,T0.2,W500,L1000,TRP,370.000	1	SNA	
..2		6902-000379	BAG AIR;LDPE,T0.2,W1000,L1800,TRP,1260.0	1	SNA	
..2		6902-000604	BAG WRAPPING;LDPE,T0.02,W500,L10000,TRP,	8.35	SNA	
..2		6902-000609	BAG ROLL;LDPE,T0.05,W2400,L1000,TRP,30.0	0.19	SNA	
..2	T0524	6902-000960	BAG PE;NITRON,T0.015/T0.5,W1600,L1100,TR	1	SNA	
..2		BN69-00391Q	PAD-ANGLE;T4,50,1800,YEL,400g	1	SNA	
..2	T0246	BN69-04327A	CUSHION-SET;LC650 55,EPS,16.7g/l	1	SNA	
..2	T0214	AA61-20285C	HOLDER-BOX;CORAL,PP,BLACK,HB,17.5g	4	SA	
..2		BN68-02422B	LABEL-WARNING SHIPPING;ALL MODEL,A/P 100	1	SNA	
..2	M040	6922-000013	BAND PP;PP,W18,L2300m,TRP,21000g	0.81	SNA	
..2		6902-001126	BAG SHEET;HDPE/NITRON,T0.015/T1.0,W500,L	1	SNA	
0.1		BN92-05947A	ASSY LABEL;LA46C630K1FXXZ,N84A	1	SNA	
..2	T0527	BP68-00052B	LABEL-00,RATING;CCTV,TETRON PAPER,T0.05,	1	SNA	
0.1	ACCE1	BN92-05958A	ASSY ACCESSORY;LA55C650L1FXXZ,LC650,N84A	1	SNA	
..2		BN96-13675A	ASSY ACCESSORY-MANUAL;LA40C650L1FXXZ,LC6	1	SNA	
...3	T0524	6902-000110	BAG PE;LDPE,T0.05,W250,L400,TRP,28,2,9.2	1	SNA	
...3	T0527	AA68-00764A	LABEL-PASSING;SAMSUNG ALL,ART PAPER,CLR,	1	SNA	
...3	T0527	AA68-02517A	LABEL;PJTV(TTSEC),COPPERPLATE,50,75,YELL	1	SNA	
...3	T0059	AA68-03184A	MANUAL FLYER-CARD-08;ALL MODEL,CHINESE,2	1	SNA	
...3	T0527	BN68-00513A	LABEL-E,PASS;ALL MODEL,YUPO(110G),50X15,	1	SNA	
...3		BN68-02186A	MANUAL FLYER-TOC GUIDE;COMM,SAMSUNG,11 L	1	SNA	
...3		BN68-02514A	MANUAL USERS;LC650&LC630,SAMSUNG,SC,CHIN	1	SNA	
..2	ACCE2	BN96-13695A	ASSY ACCESSORY-CABLE;LA55C650L1FXXZ,LC65	1	SNA	
...3	T0268	3903-000082	CBF-POWER CORD;DT,CN,IP3/YES(A),3P_Lug,2	1	SA	
...3	T0524	6902-001107	BAG PE;LDPE,T0.05,W450,L400,TRP,0,3Separ	1	SNA	
...3	M9889	BN63-01798B	CLOTH-CLEAN;cloth,180,200,sea blue,ToC	1	SA	
...3	T0531	BN63-06340A	COVER-BOTTOM;55,LC650,HIPS,HB,BK0020	1	SNA	
...3	T0527	BN68-00513A	LABEL-E,PASS;ALL MODEL,YUPO(110G),50X15,	1	SNA	
...3		BN43-00004A	BATTERY;BM1L,BATTERY,MN,600mAh,7.9g	2	SNA	
...3		BN61-05596A	HOLDER-WIRE CABLE;LED TV,LDPE,T0.8,L150,	1	SNA	
...3	REMO2	BN59-01028A	REMOCON;TM1060,SAMSUNG,20PIN SINGLE,49KE	1	SA	
...3	T0010	BN96-08624A	ASSY HOLDER P;08 PDP MODEL,ABS HB,GRAY	1	SNA	
...4	T0010	BN61-04529A	HOLDER-RING;ABS, HB,GRAY	4	SNA	
...4		6902-000683	BAG ZIPPER;LDPE,T0.05,W60,L60,TRP,4-PE M	1	SNA	
...3	M0254	AA59-00416A	ANT SHIELD BOX;UGC-AS-001A,PAL-BG,DK,I,M	1	SA	
0.1		BN91-05276U	ASSY SHIELD;LA55C650L1FXXZ	1	SNA	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
..2	T0081	6001-002284	SCREW-MACHINE;BH,+,M4,L8,ZPC(WHT),SWRCH1	11	SA	
..2	T0081	6001-002604	SCREW-MACHINE;BH,+,M4,L10,ZPC(WHT),SWRCH	2	SA	
..2	M0081	6003-000337	SCREW-TAPTYPE;BH,+,S,M4,L10,ZPC(BLK),SWR	6	SA	
..2	M0081	6003-001003	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	6	SA	
..2	M2893	BN39-01024F	LEAD CONNECTOR;LN55C650L1FXZA,UL3239 #24	1	SA	
..2	M2893	BN39-01279G	LEAD CONNECTOR;LN55C650L1FXZA,UL1061 #28	1	SA	
..2	P001A	BN44-00342A	AC VSS(I)-TV;PSIV361610A,I55F1_ASM,11.0m	1	SA	
..2		BN61-06441A	HOLDER-INLET;LC530,ABS,V0	1	SNA	
..2	M0230	BN96-12723E	ASSY CABLE P-FPCB LVDS CABLE;120Hz-55inc	1	SA	
..2	M0523	BN96-12974A	ASSY BRACKET P-WALL;46,52,55,LC650,SECC,	4	SNA	
...3	T0101	BN61-05997A	BRACKET-WALL;LC650 46,SECC,T1.6	4	SNA	
...3		BN60-00188A	SPACER-FOAM;LCD,FELT,20,3.0,30,Center :	4	SNA	
..2	T0910	BN96-13343A	ASSY BRACKET P-STAND LINK;LC530 52/55,SE	1	SNA	
...3		BN61-02429K	STUD-PEM;PNB,M3.8,D7,L14.9,ZPC(SIL),SUM2	2	SNA	
...3	M0115	BN61-05999A	BRACKET-STAND LINK;LC650 55,SECC,T2.0	1	SNA	
...3		BN61-05281A	HOLDER-CLAMP;LCD,NYLON 66,WHT	3	SNA	
..2	CIS1	0203-001586	TAPE-FILAMENT;#893,0.15,25,55	0.32	SNA	
..2		BN73-00273B	SILICON/RUBBER-GAPPAD;UE32C6500,SILICON+	1	SNA	
..2		BN61-06559A	HOLDER-GROUND;LC550,SUS304,0.3	2	SNA	
..2		BN98-02768A	ASSY K/D-SHIELD AV;LA55C630K1F,N84A,DTV	1	SNA	
...3	M2893	BN39-01267M	LEAD CONNECTOR;LN55C650L1FXZA,Flat type,	1	SA	
...3		BN61-05990B	HOLDER-SIDE AV;40,LC650,ABS+PMMA,BK0007,	1	SNA	

1. Precautions

1-1. Safety Precautions

Follow these safety, servicing and ESD precautions to prevent damage and to protect against potential hazards such as electrical shock.

1-1-1. Warnings

1. For continued safety, do not attempt to modify the circuit board.
2. Disconnect the AC power and DC power jack before servicing.

1-1-2. Servicing the LCD TV

1. When servicing the LCD TV, Disconnect the AC line cord from the AC outlet.
2. It is essential that service technicians have an accurate voltage meter available at all times. Check the calibration of this meter periodically.

1-1-3. Fire and Shock Hazard

Before returning the LCD TV to the user, perform the following safety checks:

1. Inspect each lead dress to make certain that the leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the LCD TV.
2. Inspect all protective devices such as nonmetallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor/capacitor networks, mechanical insulators, etc.
3. Leakage Current Hot Check (Figure 1-1):

WARNING : Do not use an isolation transformer during this test.

Use a leakage current tester or a metering system that complies with American National Standards Institute (ANSI C101.1, Leakage Current for Appliances), and Underwriters Laboratories (UL Publication UL1410, 59.7).

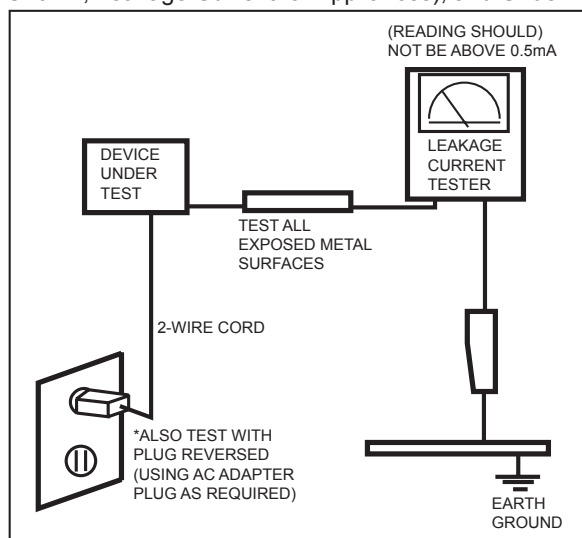


Figure 1-1. Leakage Current Test Circuit

4. With the unit completely reassembled, plug the AC line cord directly into a 120V AC outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, conduit, etc.) and all exposed metal parts, including: metal cabinets, screwheads and control shafts. The current measured should not exceed 0.5 milliamp. Reverse the power-plug prongs in the AC outlet and repeat the test.

1-1-4. Product Safety Notices

Some electrical and mechanical parts have special safety-related characteristics which are often not evident from visual inspection. The protection they give may not be obtained by replacing them with components rated for higher voltage, wattage, etc. Parts that have special safety characteristics are identified by  on schematics and parts lists. A substitute replacement that does not have the same safety characteristics as the recommended replacement part might create shock, fire and/or other hazards. Product safety is under review continuously and new instructions are issued whenever appropriate.

1-2. Servicing Precautions

WARNING: An electrolytic capacitor installed with the wrong polarity might explode.

Caution: Before servicing units covered by this service manual, read and follow the Safety Precautions section of this manual.

Note: If unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions, always follow the safety precautions.

1-2-1 General Servicing Precautions

1. Always unplug the unit's AC power cord from the AC power source and disconnect the DC Power Jack before attempting to:
(a) remove or reinstall any component or assembly, (b) disconnect PCB plugs or connectors, (c) connect a test component in parallel with an electrolytic capacitor.
2. Some components are raised above the printed circuit board for safety. An insulation tube or tape is sometimes used. The internal wiring is sometimes clamped to prevent contact with thermally hot components. Reinstall all such elements to their original position.
3. After servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the area around the serviced part has not been damaged.
4. Check the insulation between the blades of the AC plug and accessible conductive parts (examples: metal panels, input terminals and earphone jacks).
5. Insulation Checking Procedure: Disconnect the power cord from the AC source and turn the power switch ON. Connect an insulation resistance meter (500 V) to the blades of the AC plug. The insulation resistance between each blade of the AC plug and accessible conductive parts (see above) should be greater than 1 megohm.
6. Always connect a test instrument's ground lead to the instrument chassis ground before connecting the positive lead; always remove the instrument's ground lead last.

1-3. Electrostatically Sensitive Devices (ESD) Precautions

Some semiconductor (solid state) devices can be easily damaged by static electricity. Such components are commonly called Electrostatically Sensitive Devices (ESD). Examples of typical ESD are integrated circuits and some field-effect transistors. The following techniques will reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging wrist-strap device. To avoid a shock hazard, be sure to remove the wrist strap before applying power to the LCD TV.
2. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of an electrostatic charge.
3. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ESDs.
4. Use only a grounded-tip soldering iron to solder or desolder ESDs.
5. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ESDs.
6. Do not remove a replacement ESD from its protective package until you are ready to install it. Most replacement ESDs are packaged with leads that are electrically shorted together by conductive foam, aluminum foil or other conductive materials.
7. Immediately before removing the protective material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.
Caution: Be sure no power is applied to the chassis or circuit and observe all other safety precautions.
8. Minimize body motions when handling unpackaged replacement ESDs. Motions such as brushing clothes together, or lifting your foot from a carpeted floor can generate enough static electricity to damage an ESD.

1-4. Installation Precautions

1. For safety reasons, more than a people are required for carrying the product.
2. Keep the power cord away from any heat emitting devices, as a melted covering may cause fire or electric shock.
3. Do not place the product in areas with poor ventilation such as a bookshelf or closet. The increased internal temperature may cause fire.
4. Bend the external antenna cable when connecting it to the product. This is a measure to protect it from being exposed to moisture. Otherwise, it may cause a fire or electric shock.
5. Make sure to turn the power off and unplug the power cord from the outlet before repositioning the product. Also check the antenna cable or the external connectors if they are fully unplugged. Damage to the cord may cause fire or electric shock.
6. Keep the antenna far away from any high-voltage cables and install it firmly. Contact with the highvoltage cable or the antenna falling over may cause fire or electric shock.
7. When installing the product, leave enough space (0.1m) between the product and the wall for ventilation purposes. A rise in temperature within the product may cause fire.

Memo

Model	LA37C630*	
Feature		
▶ DTV/ATV, 4-HDMI, 2-Component, 2-A/V, 2USB2.0, 1-D-sub, 1LAN ▶ Brightness : 500cd/m² ▶ Contrast Ratio : 6,000:1 ▶ Response time : 5ms ▶ Full HDTV (1920 x 1080 pixels) ▶ PIP(in HDMI1, 2, 3, 4, Component1, 2, PC mode and Sub picture is available DTV/ATV, AV)		
Specifications		
Item	Description	
LCD Panel	T370HW03 VH,AU37H3H,8bit,37,16.7M,16:9,0 to +50,12V,AMVA3,CCFL,120Hz	
Scanning Frequency	Horizontal : 60kHz ~ 73kHz (Automatic) Vertical : 47Hz ~ 63Hz (Automatic)	
Display Colors	16.7 million colors	
Maximum resolution	Horizontal : 1920 Pixels Vertical : 1080 Pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω , internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Maximum Pixel Clock rate	310MHz	
Active Display Horizontal/Vertical	819.36(H) x 460.89(V) mm	
AC power voltage & Frequency	CHN : AC 220V~240V,50/60Hz HK : AC 100V~240V,50/60Hz	
Power Consumption	< 140 W (< 0.3W, stand by)	
Dimensions Set (W x D x H)	906.7 x 255.0 x 620.8 mm_with stand 906.7 x 78.5 x 573.8 mm_without stand (520.0 x 255.0 mm_stand)	
Weight (Set with Stand)	15 kg	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	DMB-T, DVB-C clear QAM, PAL, NT4.43
	Sound	BG, DK, NICAM, MPEG1
Environmental Considerations	Operating Temperature: 32°F~122°F(0°C~50°C) Operating Humidity : 10%~90% Storage Temperature: -4°F~140°F(-20°C~60°C) Storage Humidity: 10%~90%	
Audio spec.	- MAX Internal speaker Out : Right => 10W, Left => 10W - BASS Control Range : -8 dB ~ + 8dB - TREBLE Control Range : -8 dB ~ +8 dB - Headphone Out : 10 mW MAX - Output Frequency : RF : 80 Hz ~ 15 kHz A/V : 80 Hz ~ 20 kHz	
Note: Anynet+, WISELINK		

2. Product specifications

Model	LA40C630*	
Feature		
▶ DTV/ATV, 4-HDMI, 2-Component, 2-A/V, 2USB2.0, 1-D-sub, 1LAN ▶ Brightness : 500cd/m² ▶ Contrast Ratio : 7,000:1 ▶ Response time : 5ms ▶ Full HDTV (1920 x 1080 pixels) ▶ PIP(in HDMI1, 2, 3, 4, Component1, 2, PC mode and Sub picture is available DTV/ATV, AV)		
Specifications		
Item	Description	
LCD Panel	LTF400HF 16, 40inch 1.07Billion(10bit Dithering), 16:9, 0 to 50, 12V, 72%, 40 inch FHD	
Scanning Frequency	Horizontal : 60kHz ~ 73kHz (Automatic) Vertical : 57Hz ~ 63Hz (Automatic)	
Display Colors	16.7 million colors	
Maximum resolution	Horizontal : 1920 Pixels Vertical : 1080 Pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω , internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Maximum Pixel Clock rate	310MHz	
Active Display Horizontal/Vertical	885.6(H) x 498.15 (V) mm	
AC power voltage & Frequency	CHN : AC 220V~240V,50/60Hz HK : AC 100V~240V,50/60Hz	
Power Consumption	<180 W (< 0.3W, stand by)	
Dimensions Set (W x D x H)	976.2 x 255.0 x 659.3mm_with stand 976.2 x 80.4 x 614.9mm_without stand (520.0 x 255.0 mm_stand)	
Weight (Set with Stand)	17.7 kg	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	DMB-T, DVB-C clear QAM, PAL, NT4.43
	Sound	BG, DK, NICAM, MPEG1
Environmental Considerations	Operating Temperature: 32°F~122°F(0°C~50°C) Operating Humidity : 10%~90% Storage Temperature: -4°F~140°F(-20°C~60°C) Storage Humidity: 10%~90%	
Audio spec.	- MAX Internal speaker Out : Right => 10W, Left => 10W - BASS Control Range : -8 dB ~ + 8dB - TREBLE Control Range : -8 dB ~ +8 dB - Headphone Out : 10 mW MAX - Output Frequency : RF : 80 Hz ~ 15 kHz A/V : 80 Hz ~ 20 kHz	
Note: Anynet+, WISELINK		

Model	LA46C630*	
Feature		
▶ DTV/ATV, 4-HDMI, 2-Component, 2-A/V, 2USB2.0, 1-D-sub, 1LAN ▶ Brightness : 500cd/m² ▶ Contrast Ratio : 7000:1 ▶ Response time : 5ms ▶ Full HDTV (1920 x 1080 pixels) ▶ PIP(in HDMI1, 2, 3, 4, Component1, PC mode and Sub picture is available DTV/ATV, AV)		
Specifications		
Item	Description	
LCD Panel	LTF460HJ02, 8bit, 46inch, 1.07billion(10bit detherning), 16:9, 0 to 50, 12V, 72%, 46 inch FHD	
Scanning Frequency	Horizontal : 30 kHz ~ 80 kHz (Automatic) Vertical : 56 Hz ~ 75 Hz (Automatic)	
Display Colors	16.7 million colors	
Maximum resolution	Horizontal : 1920 Pixels Vertical : 1080 Pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω, internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Maximum Pixel Clock rate	310MHz	
Active Display Horizontal/Vertical	1018.08(H) x 572.67(V) mm	
AC power voltage & Frequency	CHN : AC 220V~240V,50/60Hz HK : AC 100V~240V,50/60Hz	
Power Consumption	< 240 W (< 0.3W, stand by)	
Dimensions Set (W x D x H)	1107.7 x 275.0 x 734.0 mm_with stand 1107.7 x 80.3 x 689.1 mm_without stand (550.0 x 275.0 mm_stand)	
Weight (Set with Stand)	21.9 kg	
TV System	Tuning	Frequency Synthesizer (Refer to detailed Frequency Table)
	System	DMB-T, DVB-C clear QAM, PAL, NT4.43
	Sound	BG, DK, NICAM, MPEG1
Environmental Considerations	Operating Temperature: 32°F~122°F(0°C~50°C) Operating Humidity : 10%~90% Storage Temperature: -4°F~140°F(-20°C~60°C) Storage Humidity: 10%~90%	
Audio spec.	- MAX Internal speaker Out : Right => 10W, Left => 10W - BASS Control Range : -8 dB ~ + 8dB - TREBLE Control Range : -8 dB ~ +8 dB - Headphone Out : 10 mW MAX - Output Frequency : RF : 80 Hz ~ 15 kHz A/V : 80 Hz ~ 20 kHz	
Note: Anynet+, WISELINK		

2. Product specifications

Model	LA55C630*	
Feature		
▶ DTV/ATV, 4-HDMI, 2-Component, 2-A/V, 2USB2.0, 1-D-sub, 1LAN ▶ Brightness : 500cd/m² ▶ Contrast Ratio : 7000:1 ▶ Response time : 5ms ▶ Full HDTV (1920 x 1080 pixels) ▶ PIP(in HDMI1, 2, 3, 4, Component1, PC mode and Sub picture is available DTV/ATV, AV)		
Specifications		
Item	Description	
LCD Panel	LTF460HJ02, 8bit, 46inch, 1.07billion(10bit detherning), 16:9, 0 to 50, 12V, 72%, 46 inch FHD	
Scanning Frequency	Horizontal : 30 kHz ~ 80 kHz (Automatic) Vertical : 56 Hz ~ 75 Hz (Automatic)	
Display Colors	16.7 million colors	
Maximum resolution	Horizontal : 1920 Pixels Vertical : 1080 Pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω, internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Maximum Pixel Clock rate	310MHz	
Active Display Horizontal/Vertical	1018.08(H) x 572.67(V) mm	
AC power voltage & Frequency	CHN : AC 220V~240V,50/60Hz HK : AC 100V~240V,50/60Hz	
Power Consumption	< 240 W (< 0.3W, stand by)	
Dimensions Set (W x D x H)	1107.7 x 275.0 x 734.0 mm_with stand 1107.7 x 80.3 x 689.1 mm_without stand (550.0 x 275.0 mm_stand)	
Weight (Set with Stand)	21.9 kg	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	DMB-T, DVB-C clear QAM, PAL, NT4.43
	Sound	BG, DK, NICAM, MPEG1
Environmental Considerations	Operating Temperature: 32°F~122°F(0°C~50°C) Operating Humidity : 10%~90% Storage Temperature: -4°F~140°F(-20°C~60°C) Storage Humidity: 10%~90%	
Audio spec.	- MAX Internal speaker Out : Right => 10W, Left => 10W - BASS Control Range : -8 dB ~ + 8dB - TREBLE Control Range : -8 dB ~ +8 dB - Headphone Out : 10 mW MAX - Output Frequency : RF : 80 Hz ~ 15 kHz A/V : 80 Hz ~ 20 kHz	
Note: Anynet+, WISELINK		

Model	LA32C650*	
Feature		
▶ DTV/ATV, 4-HDMI, 2-Component, 2-A/V, 2USB2.0, 1-D-sub, 1LAN ▶ Brightness : 500cd/m² ▶ Contrast Ratio : 6000:1 ▶ Response time : 5ms ▶ Full HDTV (1920 x 1080 pixels) ▶ PIP(in HDMI1, 2, 3, 4, Component1, PC mode and Sub picture is available DTV/ATV, AV)		
Specifications		
Item	Description	
LCD Panel	LTF320HF01 ,32inch, 8bit_16.7M, 16:9, 0.36375(H)*0.36375(V),0 to 50, 12V, SPVA, 72%, 32 inch FHD, 4U-Lamp (Second Panel : T315HW04 V3, 31.5 inch, 8bit+2FRC_1.07billion, 16:9, 0.36375(H)*0.36375(V), 0 to 50, 12V, SPVA, 72%, FHD)	
Scanning Frequency	Horizontal : 131.52Hz ~ 139.2Hz (Automatic) Vertical : 118kHz ~ 122kHz (Automatic)	
Display Colors	16.7 million colors	
Maximum resolution	Horizontal : 1920 Pixels Vertical : 1080 Pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω , internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Maximum Pixel Clock rate	310MHz	
Active Display Horizontal/Vertical	698.4 (H) x 392.85 (V) mm	
AC power voltage & Frequency	CHN : AC 220V~240V,50/60Hz HK : AC 100V~240V,50/60Hz	
Power Consumption	< 130W (<0.3W, stand by)	
Dimensions Set (W x D x H)	789.2 x 240.0 x 555.9 mm_with stand 789.2 x 77.8 x 509.9 mm_without stand (445.0 x 77.8 mm_stand)	
Weight (Set with Stand)	11.8 kg	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	DMB-T, DVB-C clear QAM, PAL, NT4.43
	Sound	BG, DK, NICAM, MPEG1
Environmental Considerations	Operating Temperature: 32°F~122°F(0°C~50°C) Operating Humidity : 10%~90% Storage Temperature: -4°F~140°F(-20°C~60°C) Storage Humidity: 10%~90%	
Audio spec.	- MAX Internal speaker Out : Right => 10W, Left => 10W - BASS Control Range : -8 dB ~ + 8dB - TREBLE Control Range : -8 dB ~ +8 dB - Headphone Out : 10 mW MAX - Output Frequency : RF : 80 Hz ~ 15 kHz A/V : 80 Hz ~ 20 kHz	
Note: Anynet+, WISELINK, Internet TV		

2. Product specifications

Model	LA37C650*	
Feature		
▶ DTV/ATV, 4-HDMI, 2-Component, 2-A/V, 2USB2.0, 1-D-sub, 1LAN ▶ Brightness : 500cd/m² ▶ Contrast Ratio : 5000:1 ▶ Response time : 5ms ▶ 100Hz Full HDTV (1920 x 1080 pixels) ▶ PIP(in HDMI1, 2, 3, 4, Component1, PC mode and Sub picture is available DTV/ATV, AV)		
Specifications		
Item	Description	
LCD Panel	T370HW03 VH, 10bit_1.07B, 16:9, 0 to 50, 12V, 72%, 37inch FHD	
Scanning Frequency	Horizontal : 131.52Hz ~ 135.6Hz (Automatic) Vertical : 118Hz ~ 122Hz (Automatic)	
Display Colors	16.7 million colors	
Maximum resolution	Horizontal : 1920 Pixels Vertical : 1080 Pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω , internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Maximum Pixel Clock rate	310MHz	
Active Display Horizontal/Vertical	819.36(H) x 460.89(V) mm	
AC power voltage & Frequency	CHN : AC 220V~240V,50/60Hz HK : AC 100V~240V,50/60Hz	
Power Consumption	<140 W (< 0.3W, stand by)	
Dimensions Set (W x D x H)	906.7 x 255.0 x 620.8 mm_with stand 906.7 x 78.5 x 573.8 mm_without stand (520.0 x 255.0 mm_stand)	
Weight (Set with Stand)	15 kg	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	DMB-T, DVB-C clear QAM, PAL, NT4.43
	Sound	BG, DK, NICAM, MPEG1
Environmental Considerations	Operating Temperature: 32°F~122°F(0°C~50°C) Operating Humidity : 10%~90% Storage Temperature: -4°F~140°F(-20°C~60°C) Storage Humidity: 10%~90%	
Audio spec.	- MAX Internal speaker Out : Right => 10W, Left => 10W - BASS Control Range : -8 dB ~ + 8dB - TREBLE Control Range : -8 dB ~ +8 dB - Headphone Out : 10 mW MAX - Output Frequency : RF : 80 Hz ~ 15 kHz A/V : 80 Hz ~ 20 kHz	
Note: Anynet+, WISELINK, Internet TV		

2-7

2. Product specifications

Model	LA46C650*	
Feature		
▶ Digital-TV, RF, 4-HDMI, 2Ext, Component, 1-A/V, 2USB2.0(HDD Support), LAN, D-sub ▶ Brightness : 500cd/m² ▶ Contrast Ratio : 6000:1 ▶ Response time : 5ms ▶ 100Hz Full HDTV (1920 x 1080 pixels) ▶ PIP(in HDMI1, 2, 3, 4, Component1, PC mode and Sub picture is available DTV/ATV, AV)		
Specifications		
Item	Description	
LCD Panel	T460HW03 VK, 8bit, 16.7M, 16:9, 0.53025(H)*0.53025(V), 0 to 50, 12V, 72%, 46 inch FHD (Second Panel: LTF460HJ01)	
Scanning Frequency	Horizontal : 100kHz ~ 140kHz (Automatic) Vertical : 90Hz ~ 125Hz (Automatic)	
Display Colors	1.07B colors	
Maximum resolution	Horizontal : 1920 Pixels Vertical : 1080 Pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω , internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Maximum Pixel Clock rate	310MHz	
Active Display Horizontal/Vertical	1018.08(H) x 572.67(V) mm	
AC power voltage & Frequency	CHN : AC 220V~240V,50/60Hz HK : AC 100V~240V,50/60Hz	
Power Consumption	< 240 W (< 0.3W, stand by)	
Dimensions Set (W x D x H)	1107.7 x 275.0 x 734.0 mm_with stand 1107.7 x 80.3 x 689.1 mm_without stand (550.0 x 275.0 mm_stand)	
Weight (Set with Stand)	21.9 kg	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	DMB-T, DVB-C clear QAM, PAL, NT4.43
	Sound	BG, DK, NICAM, MPEG1
Environmental Considerations	Operating Temperature: 32°F~122°F(0°C~50°C) Operating Humidity : 10%~90% Storage Temperature: -4°F~140°F(-20°C~60°C) Storage Humidity: 10%~90%	
Audio spec.	- MAX Internal speaker Out : Right => 10W, Left => 10W - BASS Control Range : -8 dB ~ + 8dB - TREBLE Control Range : -8 dB ~ +8 dB - Headphone Out : 10 mW MAX - Output Frequency : RF : 80 Hz ~ 15 kHz A/V : 80 Hz ~ 20 kHz	
Note: Anynet+, WISELINK, Internet TV		

2. Product specifications

Model	LA60C650*	
Feature		
▶ Digital-TV, RF, 4-HDMI, 2Ext, Component, 1-A/V, 2USB2.0(HDD Support), LAN, D-sub ▶ Brightness : 500cd/m² ▶ Contrast Ratio : 7000:1 ▶ Response time : 5ms ▶ 100Hz Full HDTV (1920 x 1080 pixels) ▶ PIP(in HDMI1, 2, 3, 4, Component1, PC mode and Sub picture is available DTV/ATV, AV)		
Specifications		
Item	Description	
LCD Panel	Second Panel : LTF550HJ01, 1.07G(Dither 10bit), 16:9, 0 to 50, 12V, 72%, 55 inch FHD	
Scanning Frequency	Horizontal : 135kHz (Automatic) Vertical : 120Hz (Automatic)	
Display Colors	1.07B colors	
Maximum resolution	Horizontal : 1920 Pixels Vertical : 1080 Pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω , internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Maximum Pixel Clock rate	310MHz	
Active Display Horizontal/Vertical	1209.6 (H) x 680.4 (V) mm	
AC power voltage & Frequency	CHN : AC 220V~240V,50/60Hz HK : AC 100V~240V,50/60Hz	
Power Consumption	< 290W (< 0.3W, stand by)	
Dimensions Set (W x D x H)	1300.7 x 305.0 x 844.8 mm_with stand 1300.7 x 85.3 x 800.2 mm_without stand (580.0 x 305.0 mm_stand)	
Weight (Set with Stand)	32.7 kg	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	DMB-T, DVB-C clear QAM, PAL, NT4.43
	Sound	BG, DK, NICAM, MPEG1
Environmental Considerations	Operating Temperature: 32°F~122°F(0°C~50°C) Operating Humidity : 10%~90% Storage Temperature: -4°F~140°F(-20°C~60°C) Storage Humidity: 10%~90%	
Audio spec.	- MAX Internal speaker Out : Right => 15W, Left => 15W - BASS Control Range : -8 dB ~ + 8dB - TREBLE Control Range : -8 dB ~ +8 dB - Headphone Out : 10 mW MAX - Output Frequency : RF : 80 Hz ~ 15 kHz A/V : 80 Hz ~ 20 kHz	
Note: Anynet+, WISELINK, Internet TV		

2-2. Specification Comparison to Old Models

• LC630

Model	Arsenal/Valencia (LE40C630)	Arsenal/Chelsea (LE40B65*)
Design		
Display Type	LCD TV	LCD TV
Built-in Tuner	O	O
Resolution	1920 x 1080	1920 x 1080
LCD Panel	TFT LCD Panel 100Hz FULL HD	TFT LCD Panel 100Hz FULL HD
Screen Size	32"/37"/40"/46"/55"/60"	32"/37"/40"/46"/55"
Picture ratio	16 : 9	16 : 9
Dimensions (W x H x D)	40 976.2 x 255.0 x 659.3 mm_with stand 976.2 x 80.4 x 614.9 mm_without stand 520.0x255.0 mm_stand	40 996.6 x 300.0 x 686.1 mm_with stand 996.6 x 82.8 x 641.4 mm_without stand
Weight	40 17.7 kg	40 21.2 kg
Brightness	500 cd/m ²	500 cd/m ²
Equalizer	5 Band	5 Band
Light Sensor	O	X
Surround Sound	3 Way SRS TruSurround Dolby Digital	3 Way SRS TruSurround Dolby Digital
Speaker Output	10W + 10W	10W + 10W
Antenna	Air(DMB-T),Cable(DVB-C clear QAM)	Air(DMB-T),Cable(DVB-C clear QAM)
USB	2 (USB1:HDD Support)	2 (USB1:HDD Support)
LAN	O	O
HDMI	4	4

■ PAL On-Air Channel Frequency Table

channel	Europe PAL-BG	INDONESIA PAL-BG	IRELAND PAL-I	South Africa PAL-I	ANGOLA PAL-I	NEWZEALAND PAL-BG	ITALY PAL-BG
A	x	x	x	x	x	x	53.75
B	x	x	x	x	x	x	62.25
C1	x	x	x	x	x	x	x
C	x	x	x	x	x	x	82.25
D	x	x	x	x	x	x	175.25
E	x	x	x	x	x	x	183.75
F	x	x	x	x	x	x	192.25
G	x	x	x	x	x	x	201.25
H	x	x	x	x	x	x	210.25
H1	x	x	x	x	x	x	217.25
H2	x	x	x	x	x	x	224.25
0	x	x	x	x	x	x	x
1	x	44.25	45.75	x	43.25	45.25	x
2	48.25	55.25	53.75	x	52.25	55.25	x
3	55.25	62.25	61.75	x	60.25	62.25	x
4	62.25	175.25	175.25	175.25	175.25	175.25	x
5	175.25	182.25	183.25	183.25	183.25	182.25	x
5A	x	x	x	x	x	x	x
6	182.25	189.25	191.25	191.25	191.25	189.25	x
7	189.25	196.25	199.25	199.25	199.25	196.25	x
8	196.25	203.25	207.25	207.25	207.25	203.25	x
9	203.25	210.25	215.25	215.25	215.25	210.25	x
9A	x	x	x	x	x	x	x
10	210.25	217.25	223.25	223.25	223.25	217.25	x
11	217.25	224.25	231.25	231.25	x	224.25	x
12	224.25	x	x	239.25	x	x	x
13	x	x	x	247.25	x	x	x
14	x	x	x	x	x	x	x
15	x	x	x	x	x	x	x
16	x	x	x	x	x	x	x
17	x	x	x	x	x	x	x
18	x	x	x	x	x	x	x
19	x	x	x	x	x	x	x
20	x	x	x	x	x	x	x
21	471.25						
22	479.25						
23	487.25						
24	495.25						
25	503.25						
26	511.25						
27	519.25						
28	527.25						
29	535.25						
30	543.25						
31	551.25						
32	559.25						
33	567.25						
34	575.25						
35	583.25						
36	591.25						
37	599.25						
38	607.25						
39	615.25						
40	623.25						
41	631.25						
42	639.25						
43	647.25						
44	655.25						
45	663.25						
46	671.25						
47	679.25						
48	687.25						
49	695.25						
50	703.25						
51	711.25						
52	719.25						
53	727.25						
54	735.25						
55	743.25						
56	751.25						
57	759.25						
58	767.25						
59	775.25			x	x	775.25	
60	783.25			x	x	783.25	
61	791.25			x	x	791.25	
62	799.25			x	x	799.25	
63	807.25			x	x	807.25	
64	815.25			x	x	815.25	
65	823.25			x	x	823.25	
66	831.25			x	x	831.25	
67	839.25			x	x	839.25	
68	847.25			x	x	847.25	
69	855.25			x	x	855.25	

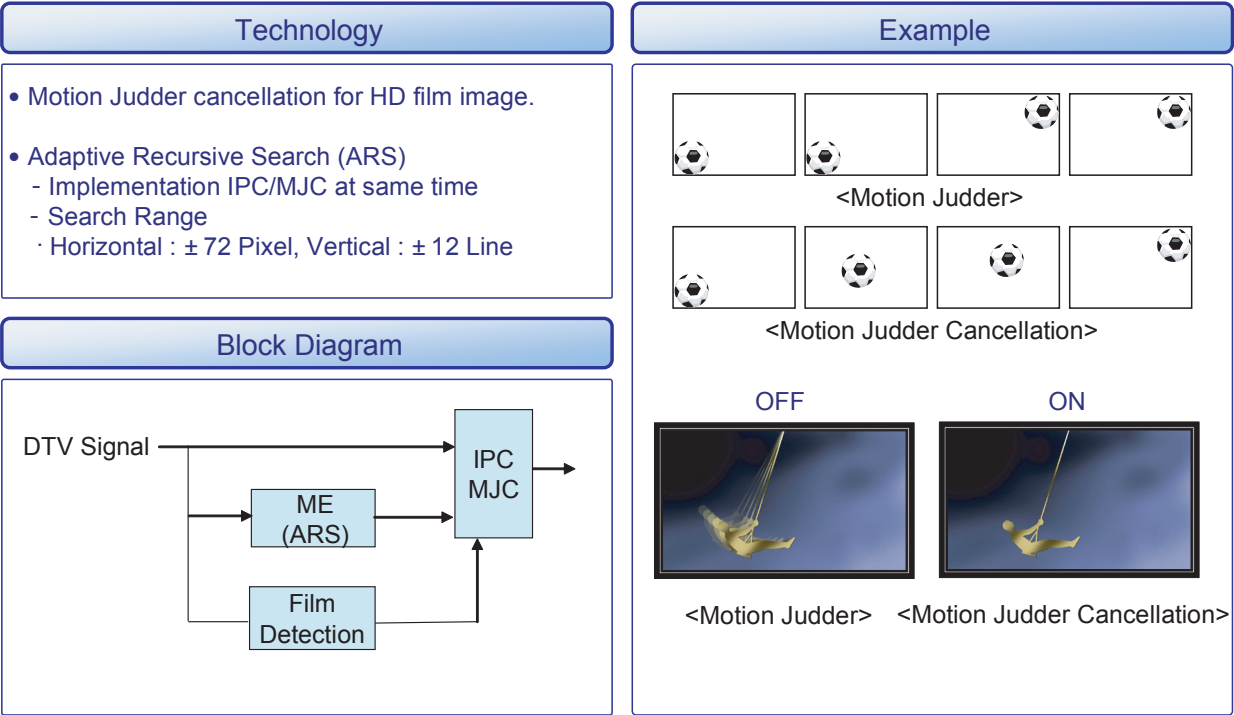
EUROPE SECAM-BG	FRANCE SECAM-L	PALII	UK PAL-I	CIS(OIRT) SECAM -DK	AUSTRALIA PAL-BG	CHINA PAL-D
x	47.75	x	x	x	x	x
x	55.75	x	x	x	x	x
x	60.50	x	x	x	x	x
x	63.75	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	46.25	x
41.25	176.00	45.00	x	49.75	57.25	49.75
48.25	184.00	51.75	x	59.25	64.25	57.75
55.25	192.00	56.75	x	77.25	86.25	65.75
62.25	200.00	61.75	x	85.25	95.25	77.25
175.25	208.00	66.75	x	93.25	102.25	85.25
x	x	x	x	x	138.25	x
182.25	216.00	179.75	x	175.25	175.25	168.25
189.25	x	184.75	x	183.25	182.25	176.25
196.25	x	189.75	x	191.25	189.25	184.25
203.25	x	194.75	x	199.25	196.25	192.25
x	x	x	x	x	203.25	x
210.25	x	199.75	x	207.25	209.25	200.25
217.25	x	204.75	x	215.25	216.25	208.25
224.25	x	209.75	x	223.25	x	216.25
x	x	214.75	x	x	x	471.25
x	x	x	x	x	x	479.25
x	x	x	x	x	x	487.25
x	x	x	x	x	x	495.25
x	x	x	x	x	x	503.25
x	x	x	x	x	x	511.25
x	x	x	x	x	x	519.25
x	x	x	x	x	x	527.25
					x	535.25
					x	543.25
					x	551.25
					x	559.25
					x	607.25
					x	615.25
					x	623.25
					527.25	631.25
					534.25	639.25
					541.25	647.25
					548.25	655.25
					555.25	663.25
					562.25	671.25
					569.25	679.25
					576.25	687.25
					583.25	695.25
					590.25	703.25
					597.25	711.25
					604.25	719.25
					611.25	727.25
					618.25	735.25
					625.25	743.25
					632.25	751.25
					639.25	759.25
					646.25	767.25
					653.25	775.25
					660.25	783.25
					667.25	791.25
					674.25	799.25
					681.25	807.25
					688.25	815.25
					695.25	823.25
					702.25	831.25
					709.25	839.25
					716.25	847.25
					723.25	855.25
					730.25	863.25
					737.25	x
					744.25	x
					751.25	x
					758.25	x
					765.25	x
					772.25	x
					779.25	x
					786.25	567.25
					793.25	575.25
					800.25	583.25
					807.25	591.25
					814.25	599.25

■ PAL CATV Channel Frequency Table

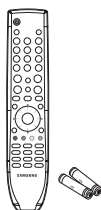
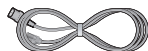
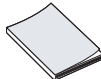
channel	Europe	INDONESIA	IRELAND	South Africa	ANGOLA	NEWZEALAND	ITALY
	PAL-BG	PAL-BG	PAL-BG	SEAAM	SEAAM	PAL-BG	PAL-BG
S1'	69.25						
S2'	76.25						
S3'	83.25						
S4'	90.25						
S5'	97.25						
S1	105.25						
S2	112.25						
S3	119.25						
S4	126.25						
S5	133.25						
S6	140.25						
S7	147.25						
S8	154.25						
S9	161.25						
S10	168.25						
S11	231.25						
S12	238.25						
S13	245.25						
S14	252.25						
S15	259.25						
S16	266.25						
S17	273.25						
S18	280.25						
S19	287.25						
S20	294.25						
S21	303.25						
S22	311.25						
S23	319.25						
S24	327.25						
S25	335.25						
S26	343.25						
S27	351.25						
S28	359.25						
S29	367.25						
S30	375.25						
S31	383.25						
S32	391.25						
S33	399.25						
S34	407.25						
S35	415.25						
S36	423.25						
S37	431.25						
S38	439.25						
S39	447.25						
S40	455.25						
S41	463.25						

CCIR	FRANCE				AUSTRALIA	CHINA
SEAAM	SEAAM-L	PALII	PALI UK	SECAM OIRT	PAL-BG	PAL-D
						x
						x
						x
						x
						x
						x
	116.75	103.25			105.25	112.25
	128.75	111.25			112.25	120.25
	140.75	119.25			119.25	128.25
	152.75	127.25			126.25	136.25
	164.75	135.25			133.25	144.25
	176.75	143.25			140.25	152.25
	188.75	151.25			147.25	160.25
	200.75	159.25			154.25	224.25
	212.75	167.25			161.25	232.25
	224.75	231.25			168.25	240.25
	236.75	239.25			231.25	248.25
	248.75	247.25			238.25	256.25
	260.75	253.00			245.25	264.25
	272.75	263.25			252.25	272.25
	284.75	271.25			259.25	280.25
	296.75	279.25			266.25	288.25
	0	287.25			273.25	296.25
	0	295.25			280.25	304.25
	0	303.25			287.25	312.25
	0	0.00			294.25	320.25
	303.25	0.00			303.25	328.25
	311.25	311.25				336.25
	319.25	319.25				344.25
	327.25	327.25				352.25
	335.25	335.25				360.25
	343.25	343.25				368.25
	351.25	351.25				376.25
	359.25	359.25				384.25
	367.25	367.25				392.25
	375.25	375.25				400.25
	383.25	383.25				408.25
	391.25	391.25				416.25
	399.25	399.25				424.25
	407.25	407.25				432.25
	415.25	415.25				440.25
	423.25	423.25				448.25
	431.25	431.25				456.25
	439.25	439.25				x
	447.25	447.25				x
	455.25	455.25				x
	463.25	463.25				x

2-3. Movie Plus: MJC(Motion Judder Cancellation)

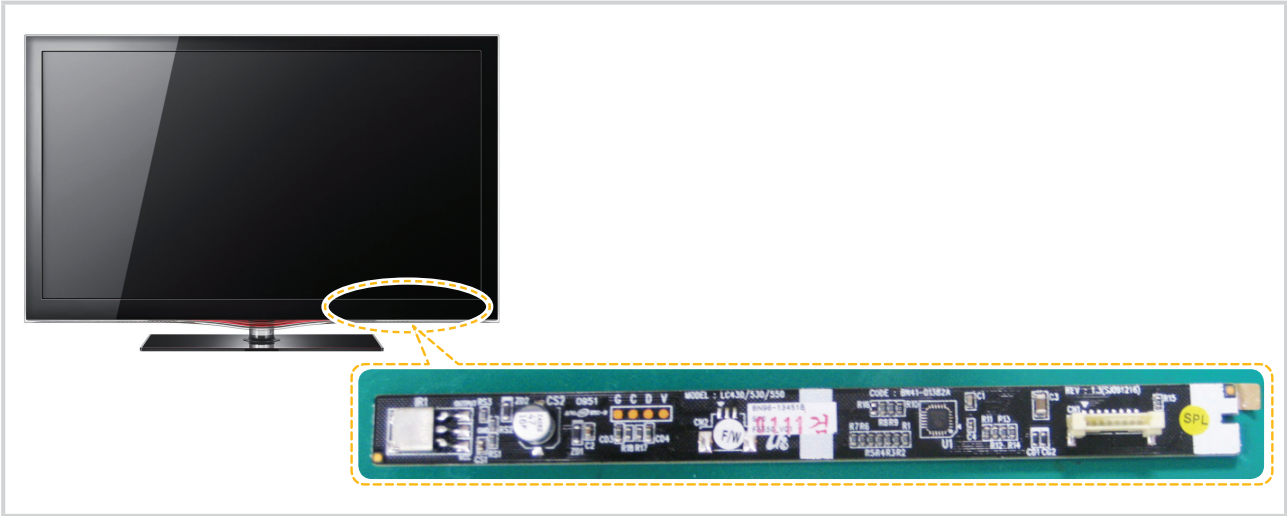


2-4. Accessories

Product	Description	Code. No	Remark
	Remote Control & Batteries (AAA x 2)	BN59-01039A	Samsung Electronics Service center
	Power Cord	3903-000525	
	Cover-Bottom	BN63-06542A(32") BN63-06543A(37", 40", 46", 55")	
	Owner's Instructions	BN68-02694A	
	Cleaning Cloth	BN63-01798B	
	Warranty Card / Safety Guide Manual (Not available in all locations)	BN68-00514E	

2-5. Light Sensor

Light sensor is used to measure the ambient light level in the enviroment as perceived by the human eye. It is designed to detect bright and dim ambient light conditions as a means of controlling the brightness of a LCD display and /or keypad.



* In our product, light sensor operates only "Standard" mode.

* **Eco Sensor**

- step1 : Read the Lux five times as the unit of 400ms.
- step2 : Transfrom the taken Lux to 20 level.
- step3 : Get the most frequent grade, them set up the current level.
- step4 : If $| \text{current level} | - | \text{previous level} | > 1$, change the level
- step5 : Refresh the Backlight set-up as the 200ms.

Lux	> 200	190	...	10	0
Sensor Backlight	20	19		1	0

2-6. DVB-T2

2-6-1. DVB-T vs T2

	DVB-T	DVB-T2
FEC	Convolutional Coding + Reed Solomon 1/2, 2/3, 3/4, 5/6, 7/8	LDPC + BCH 1/2, 3/5, 2/3, 3/4, 4/5, 5/6
Modes	QPSK, 16QAM, 64QAM	QPSK, 16QAM, 64QAM, 256QAM
Guard Interval	1/4, 1/8, 1/16, 1/32	1/4, 19/256, 1/8, 19/128, 1/16, 1/32, 1/128
FFT size	2k, 8k	1k, 2k, 4k, 8k, 16k, 32k
Scattered Pilots	8% of total	1%, 2%, 4%, 8% of total
Continual Pilots	2.6% of total	0.35% of total

2-6-2. DVB-T2 Capacity

	Current UK mode	T2
Modulation	64QAM	256QAM
FFT size	2K	32K
Guard Interval	1/32	1/128
FEC	2/3 CC + RS (8%)	3/5 LDPC + BCH (0.3%)
Scattered Pilots	8%	1%
Continual Pilots	2.6%	0.35%
P1/P2 overhead	0%	0.7%
Bandwidth	Standard	Extended
Capacity	24 Mbit/s	35.4Mbit/s

DVB-T2 Channel capacity increased 47% than DVB-T.

4. Troubleshooting

4-1. Troubleshooting

1. Check the various cable connections first.
 - Check to see if there is a burnt or damaged cable.
 - Check to see if there is a disconnected or loose cable connection.
 - Check to see if the cables are connected according to the connection diagram.
2. Check the power input to the Main Board.

3. Self Diagnosis

• Picture Test

If you think you have a picture problem, perform the picture test. Check the colour pattern on the screen to see if the problem still exists.

Yes: If the test pattern does not appear or there is noise in the test pattern, select Yes.

There may be a problem with the TV. Therefore, contact Samsung's call centre for assistance.

Yes: If the test pattern is properly displayed, select No. There may be a problem with your external equipment.

Please check your connections. If the problem still persists, refer to the external device's user manual.

• Sound Test

If you think you have a sound problem, please perform the sound test. You can check the sound by playing a built-in melody sound through the TV.

If you hear no sound from the TV's speakers, before performing the sound test, make sure **Speaker Select** is set to **TV speaker** in the Sound menu.

The melody will be heard during the test even if **Speaker Select** is set to **External Speaker** or the sound is muted by pressing the **MUTE** button.

Yes: If during the sound test you can hear sound only from one speaker or not at all, select Yes.

There may be a problem with the TV. Therefore, contact Samsung's call centre for assistance.

No: If you can hear sound from the speakers, select No. There may be a problem with your external equipment.

Please check your connections. If the problem still persists, refer to the external device's user manual.

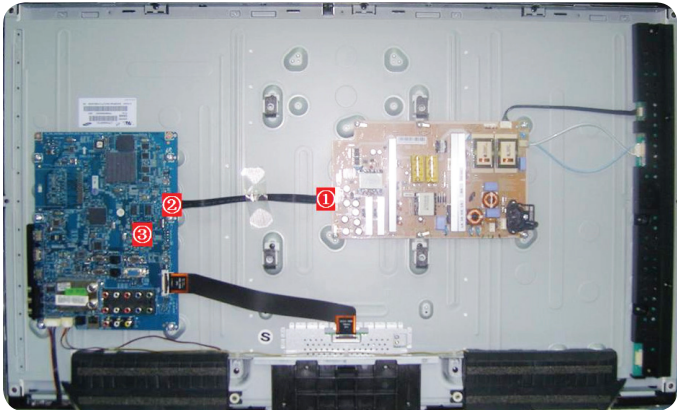
• Signal Information (digital channels only)

Unlike analogue channels, which can vary in reception quality from 'snowy' to clear, digital (HDTV) channels have either perfect reception quality or you will not receive them at all. So, unlike analogue channels, you cannot fine tune a digital channel. You can, however, adjust your antenna to improve the reception of available digital channels.

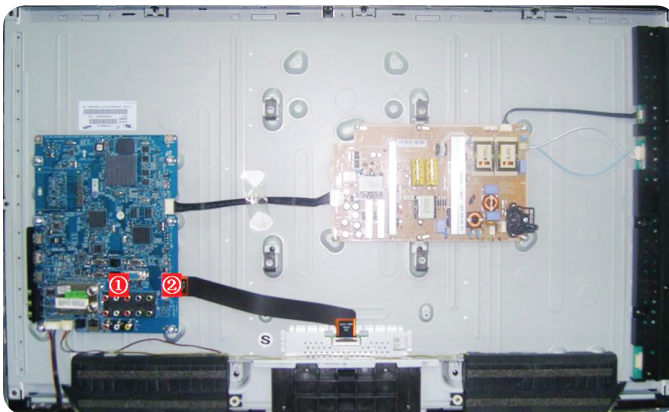
If the signal strength meter indicates that the signal is weak, physically adjust your antenna to increase the signal strength.

Continue to adjust the antenna until you find the best position with the strongest signal.

4-1-1. No Power

Symptom	- The LEDs on the front panel do not work when connecting the power cord. - The SMPS relay does not work when connecting the power cord. - The units appears to be dead.
Major checkpoints	The IP relay or the LEDs on the front panel does not work when connecting the power cord if the cables are improperly connected or the Main Board or SMPS is not functioning. In this case, check the following: - Check the internal cable connection status inside the unit. - Check the fuses of each part. - Check the output voltage of SMPS. - Replace the Main Board.
Diagnostics	 <pre> graph TD Q1[LAMP off, power indicator LED red color?] -- No --> A1[Check a connection a power cable.] Q1 -- Yes --> Q2[1 Does proper DC 13V appear at pin21,22 of CN801?] Q2 -- No --> A2[Change a Assy PCB Power.] Q2 -- Yes --> Q3[2 Does proper DC A3.3V appear at C1131_NACH, C1132_NACH?] Q3 -- No --> A3[Check a IC1103_NACH. Change a main PCB ass'y] Q3 -- Yes --> Q4[3 Does proper DC 5V, 3.3V, 1.25V(B1.2VD), 1.5V, 1.8V(MT_DDRV) appear at C1140, C1169, C1163, C1167, C1174?] Q4 -- No --> A4[Check a IC1108, IC1107, IC1109 Change a main PCB ass'y] Q4 -- Yes --> Q5[A power is supplied to set?] Q5 -- No --> A5[Check a other function. (No picture part) Replace a lcd panel.] </pre>
Caution	Make sure to disconnect the power before working on the IP board.

4-1-2. No Video (Analog PC signal)

Symptom	Audio is normal but no picture is displayed on the screen.
Major checkpoints	- Check the PC source - Check the IC6001(SDP84) - This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.
Diagnostics	 <pre> graph TD A[Power Indicator is off. Lamp on, no video.] -- Yes --> B[Check a PC source and check the connection of DSUB cable?] B -- No --> C[Input a analog PC signal and connected cable(DPMS).] B -- Yes --> D[1 Does the signal appear at R3012,R3011,R3009(R,G,B)?] D -- No --> E[PC cable. Change a PC cable. Change a main PCB ass'y.] D -- Yes --> F[2 Does the digital data appear at the output of LVDS (TP7025~TP7038 , TP7040~TP7053)?] F -- No --> G[Check a IC7001 Change a main PCB ass'y] F -- Yes --> H[Check a LVDS cable? Replace a lcd panel?] H -- No --> I[Please, Contact Tech support.] </pre> Power Indicator is off. Lamp on, no video. Yes Check a PC source and check the connection of DSUB cable? No Input a analog PC signal and connected cable(DPMS). Yes 1 Does the signal appear at R3012,R3011,R3009(R,G,B)? No PC cable. Change a PC cable. Change a main PCB ass'y. Yes 2 Does the digital data appear at the output of LVDS (TP7025~TP7038 , TP7040~TP7053)? No Check a IC7001 Change a main PCB ass'y Yes Check a LVDS cable? Replace a lcd panel? No Please, Contact Tech support.
Caution	Make sure to disconnect the power before working on the IP board.

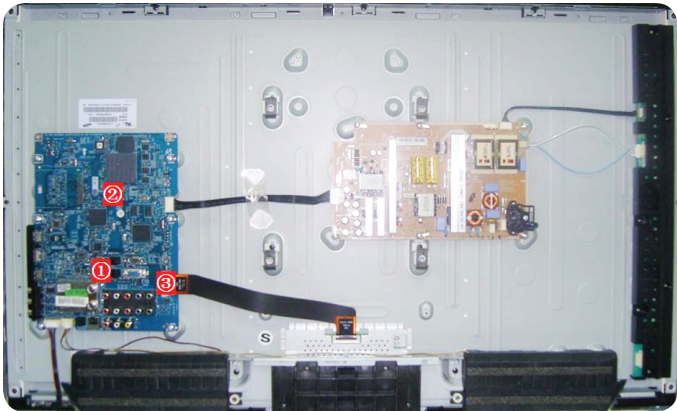
■ WAVEFORMS

1

R, G, B, H_sync input signal of IC6001(SDP84)



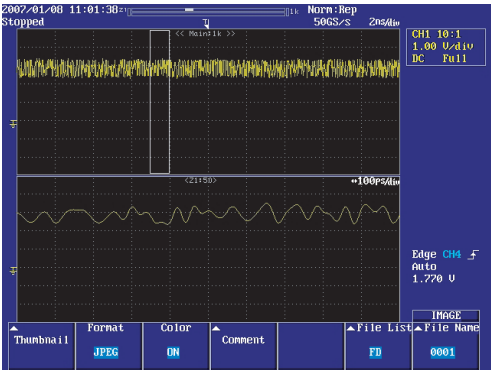
4-1-3. No Video (HDMI - Digital Signal)

Symptom	Audio is normal but no picture is displayed on the screen.
Major checkpoints	- Check the HDMI source - Check the IC3013 - This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.
Diagnostics	 <pre> graph TD Start[Power Indicator is off. Lamp on, no video.] -- Yes --> Q1{1 Check the connection of HDMI cable?} Q1 -- No --> A1[Input a HDMI cable.] Q1 -- Yes --> Q2{2 Does the digital data appear at RA3668~RA3671 around IC3013?} Q2 -- No --> A2[Check a IC3013 Change a main PCB ass'y.] Q2 -- Yes --> Q3{3 Does the digital data appear at output of LVDS (TP7025~TP7038 , TP7040~TP7053)?} Q3 -- No --> A3[Check a IC7001 Change a main PCB ass'y.] Q3 -- Yes --> Q4[Check the LVDS cable? Replace the LCD panel?] Q4 -- No --> A4[Please, Contact Tech support] </pre>
Caution	Make sure to disconnect the power before working on the IP board.

■ WAVEFORMS

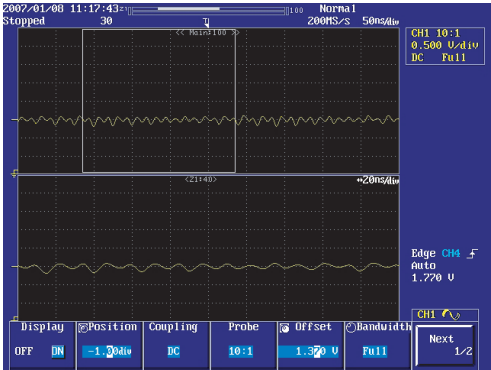
2

Digital Output Data

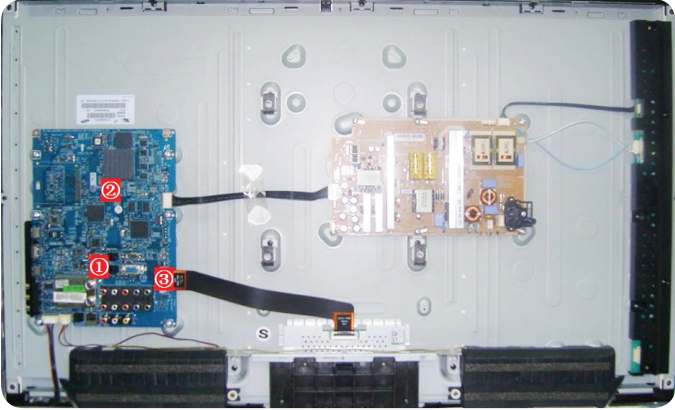


3

Signal of HDMI(Data)

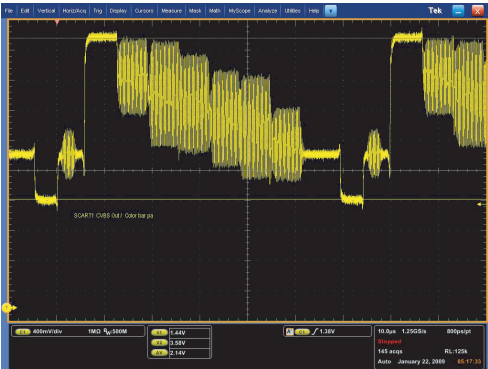


4-1-4. No Video (Tuner_CVBS)

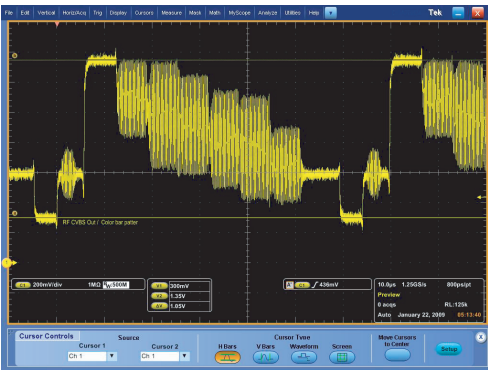
Symptom	Audio is normal but no picture is displayed on the screen.
Major checkpoints	- Check the Tuner CVBS source - Check the IC6001(SDP84) - This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.
Diagnostics	 <pre> graph TD Start[Power Indicator is off. Lamp on, no picture.] -- No --> RF[Connect the RF cable and check RF signal.] Start -- Yes --> Q1{1 Does the signal appear at R5035?} Q1 -- No --> Bplus[Check a B+ voltage (#3 of Tuner) 5V, change a main PCB ass'y.] Q1 -- Yes --> Q2{2 [4] Does the signal appear at pin 9 of TU5001?} Q2 -- No --> Tuner[Check a Tuner(TU5001) Change a main PCB ass'y.] Q2 -- Yes --> Q3{3 Does the digital data appear at the output of LVDS (TP7025~TP7038 , TP7040~TP7053)?} Q3 -- No --> IC7001[Check a IC7001 Change a main PCB ass'y] Q3 -- Yes --> Q4[Check the LVDS cable? Replace the LCD panel?] Q4 -- No --> Support[Please, Contact Tech support.] </pre>
Caution	Make sure to disconnect the power before working on the IP board.

■ WAVEFORMS

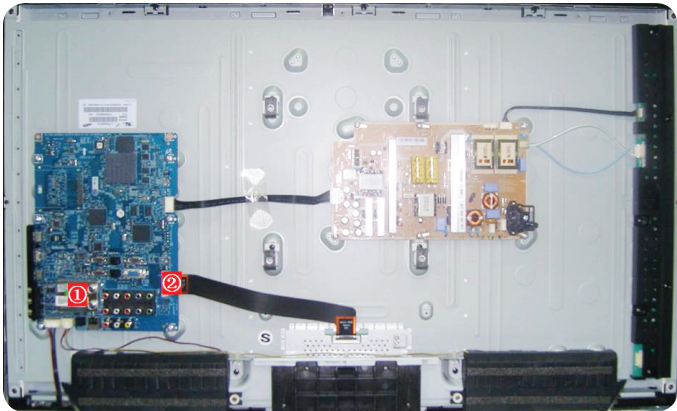
3 CVBS Output Signal



4 Tuner_CVBS Output Signal

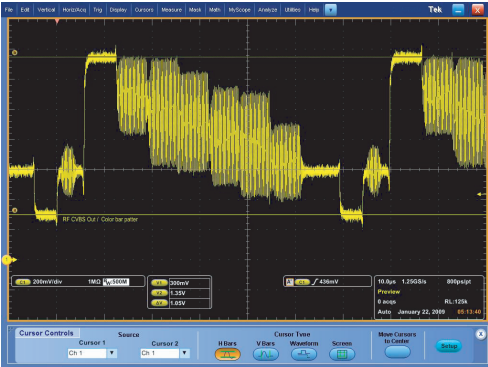


4-1-5. No Picture (Video_CVBS)

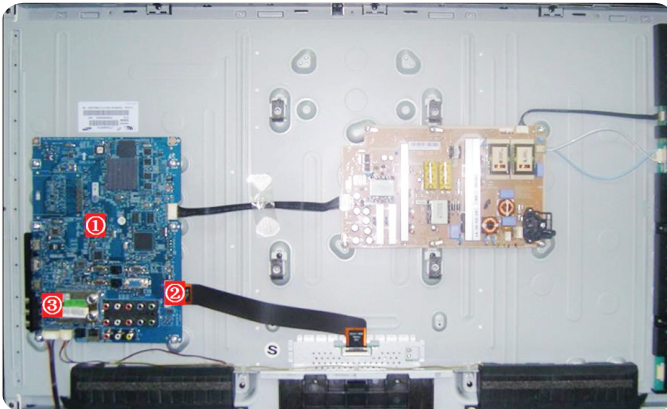
Symptom	Audio is normal but no picture is displayed on the screen.
Major checkpoints	- Check the Video Source - Check the IC6002, IC6001(SDP84), IC7001 - This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.
Diagnostics	 <pre> graph TD A[Power Indicator is off. Lamp on, no picture.] -- No --> B[Check a A/V cable and video signal.] A -- Yes --> C{1 Does the signal appear at C6852,C6853,C6854?} C -- No --> D[Check a connection harness.] C -- Yes --> E{2 Does the digital data appear at the output of LVDS (TP7025~TP7038 , TP7040~TP7053)?} E -- No --> F[Check a IC7001 Change a main PCB ass'y] E -- Yes --> G[Check a LVDS cable? Replace lcd panel?] G -- No --> H[Please, Contact Tech support.] </pre>
Caution	Make sure to disconnect the power before working on the IP board.

WAVEFORMS

4 CVBS Output Signal at C6852, C6853, C6854

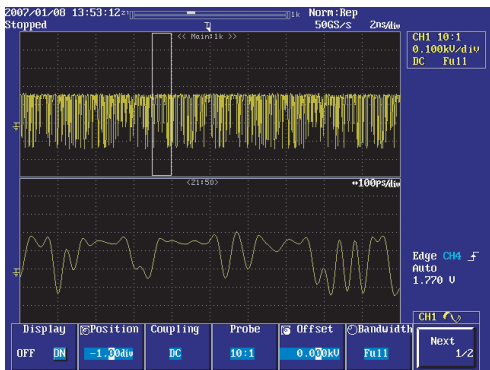


4-1-6. No Sound

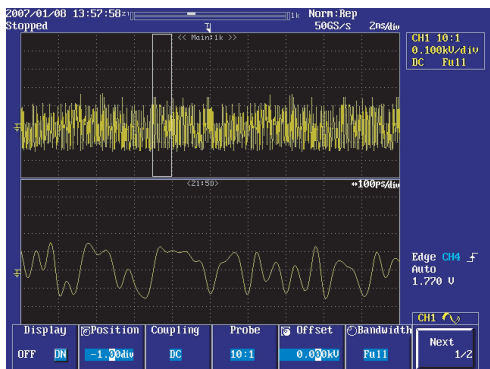
Symptom	Picture is normal But no Sound
Major checkpoints	- Check the RF Source - Check the IC6001(SDP84) - This may be happened when LVDS Cable is Connected between Panel and Main Board , But Sound cable is disconnected.
Diagnostics	 <pre> graph TD Start[Picture is display, no sound.] -- No --> Action1[Connect a sound cable. control a volume.] Start -- Yes --> Q1[1 Does the signal appear at pin #1 ~#9 , #33~#44 , #61~#64 around IC2001?] Q1 -- No --> Action2[Check a connection harness and headphone jack./Side AV Check Sound Processor IC2001] Q1 -- Yes --> Q2[2 Check the DC 12V and 9V at BD2012 and C2002?] Q2 -- No --> Action3[Check a B12VS, B9V Line. Change a main PCB ass'y.] Q2 -- Yes --> Q3[3 Does the signal appear at Pin6 , Pin9 , Pin10 , Pin13 of IC2002?] Q3 -- No --> Action4[Please, Contact Tech support.] Q3 -- Yes --> Action5[Replace the speaker ass'y?] </pre>
Caution	Make sure to disconnect the power before working on the IP board.

■ WAVEFORMS

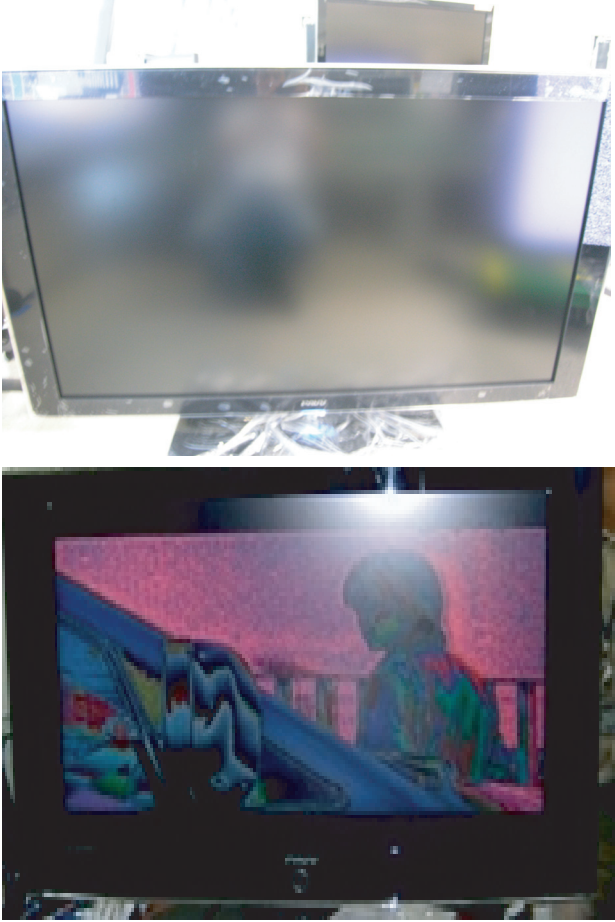
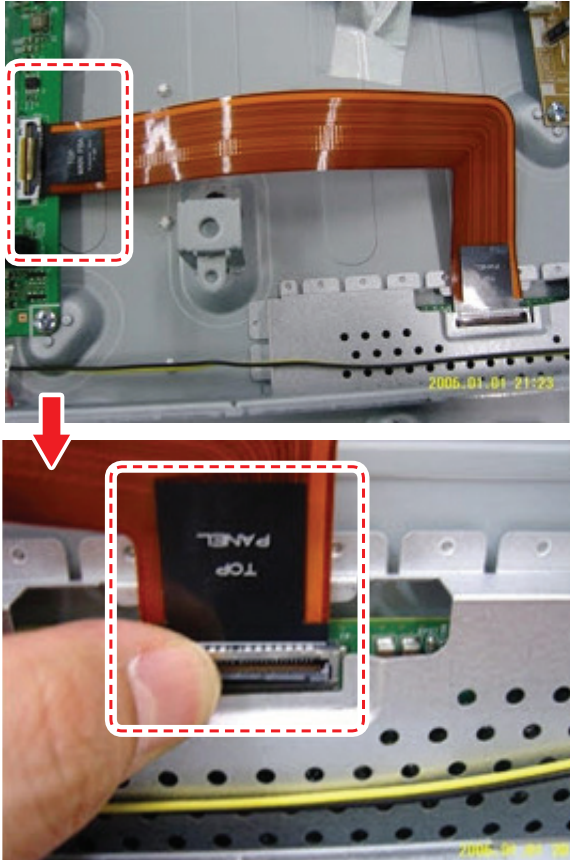
6 The Signal are Inputed to IC2002



7 The Signal are Inputed to IC2002



4-1-7. Defect Analysis ahead of models.

Defective image / Defective Symptoms	Check & Solution
 The top image shows a monitor with a completely blank screen. The bottom image shows a monitor displaying a distorted, colorful, and noisy image, likely due to a defective panel or connector.	 The top image shows the LVDS cable (orange) connected to the main board. A red dashed box highlights the connection point. A red arrow points down to the bottom image, which shows the LVDS cable being inserted into the panel connector. A red dashed box highlights the insertion point.
No Picture and normal sound. in case of defective a Panel or a defective connector between main board and panel.	Check the LVDS cable insert correctly.

4-2. Alignments and Adjustments

4-2-1. General Alignment Instruction

1. Usually, a color LCD-TV needs only slight touch-up adjustment upon installation.
Check the basic characteristics such as height, horizontal and vertical sync.
2. Use the specified test equipment or its equivalent.
3. Correct impedance matching is essential.
4. Avoid overload. Excessive signal from a sweep generator might overload the front-end of the TV. When inserting signal markers, do not allow the marker generator to distort test result.
5. Connect the TV only to an AC power source with voltage and frequency as specified on the backcover nameplate.
6. Do not attempt to connect or disconnect any wire while the TV is turned on. Make sure that the power cord is disconnected before replacing any parts.
7. To protect against shock hazard, use an isolation transformer.

4-3. Factory Mode Adjustments

4-3-1 Entering Factory Mode

To enter 'Service Mode' Press the remote -control keys in this sequence :

- If you do not have Factory remote - control



- If you have Factory remote - control



- The buttons are active in the service mode.

1. Remote - Control Key : Power, Arrow Up, Arrow Down, Arrow Left

Arrow Right, Menu, Enter, Number Key(0~9)

2. Function - Control Key : Power, CH +, CH -, VOL +, VOL -,
Menu, TV/VIDEO(Enter)

4-3-2 SERVICE MODE DISPLAY

Option
Control
SVC
Expert
ADC/WB
Advanced

4-3-3 Factory Data

■ Option

OPTION	Item	Range	Use
	Factory Reset		
	Type	Inch Vendor(A:AMLCD, D:CMO, L:AUC, I:CPT) Panel frequency (6:50/60Hz, 1:100/120Hz, 2:200/240Hz) Panel(A:AG, T:TN, U:UC) Resolution(F:FHD, H:HD, U:UD) Panel 1st/2nd(1st:0, 2nd:1) BLU (C:CCFL, L:LED, E:EDGE LED) ex) 32D1UF0E : Vendor : CMO inch : 32 120Hz FHD U/C Edge LED panel	Select Panel Type
	Local Set	EU, EU_Italy, EU_Africa, EU_Israel, NORDIG, AD_Au, CIS	Select Area
	Model	LC350, LC450, LC450H, LC451, LC452, LC457H, LC459H, LC480 LC530, LC530H, LC539H, LC540, LC550, LC560, LC570, LC580 LC610, LC620, LC630, LC631, LC632, LC633, LC640, LC650, LC652 LC653, LC654, LC670, UC4000, UC4000H, UC4010, UC5000, UC5100 UC6000, UC6200, UC6300, UC6400, UC6400H, UC6500, UC6510 UC6530, UC6540, UC6550, UC6600, UC6620, UC6630, UC6700, UC6710 UC6730, UC6740, UC6800, UC6830, UC6900, UC6900H, UC8000 PC420, PC430, PC431, PC432, PC450, PC451, PC480, PC520, PC530 PC531, PC540, PC541, PC550, PC551, PC560, PC580, PC590, PC670 PC6100, PC6400, PC6500, PC7000, PC7700, PC8000 *Default : LC650	Select Model
	Tuner	DRXKSEMCO, S2Semco, CXD_T2, DRXKSEM_E, DRXKALPS, DRXKSEM_2 SEMPA081, SEMPA082	
	DDR	0, 1, 2	
	Light Effect	ON/OFF	
	Ch table	NONE, PBA, SUWON, SESK, SEH, SERK, SDMA_AU, SDMA_NZ, SDMA_SG SEIN, SAVINA, SIEL_C, SIEL_N, TTSEC, TSED, TSE, IRAN	
	Country		
	Front Color	NONE, W-Milky, T-M-Brn, T-W-Brn, T-W-Gray, W-D-Gray, W-M-Whit W-Violet, T-C-Gray, T-R-BLK, S-BLK, S-C-Gray	Select Design for illuminance Sensor

■ Control

EDID	Item	Range	Use
	EDID ON/OFF	OFF	
	EDID WRITE ALL	SUCCESS	
	EDID WRITE PC	SUCCESS	
	EDID WRITE HDMI	SUCCESS	
	EDID WRITE HDMI1	...	
	EDID WRITE HDMI2	...	
	EDID WRITE HDMI3	...	
	EDID WRITE HDMI4	...	
	EDID 1.2PORT	NONE,Not Support	
	Front Color	NONE, W-Milky, T-M-Brn, T-W-Brn, T-W-Gray, W-D-Gray, W-M-Whit W-Violet, T-C-Gray, T-R-BLK, S-BLK, S-C-Gray	
Sub Option	Item	Range	Option
	Mute Time(VIDEO)	2	
	PROTECT	on/off	
	SUB U-COM	On/off	
	Watchdog	0	
	WD COUNT	0	
	SPREAD SPECTURM	2	
	HDMI AV MUTE TIME	40	
	DVI/HDMI SOUND	Auto	
	HOT PLUG OFF HOLD TIME	1500ms	
	HDMI LOSS TIME	1	
	HDMI_PC LOSS TIME	1	
	PC LOSS TIME	1	
	HDMI EQ1	MIDDLE	
	HDMI EQ2	MIDDLE	
	HDMI EQ3	MIDDLE	
	HDMI EQ4	MIDDLE	
	SIDE AV	OFF	
	PANEL DISPLAY TIME	735hr	
	Checksum	0*0000	
	View Log		
	Font Data Viewer		

Hotel Option	Item	Range	Use
	HOTEEL MODE	OFF	
	POWER ON CHANNEL	3	
	POWER ON BAND	AIR	
	POWER ON VOLUME	10	
	MAX VOLUME	100	
	PANEL BUTTOM LOCK	ON	
	POWER ON SOURCE	TV	

Shop Option	Item	Range	Use
	Shop Mode	OFF	
	USB DEMO ON(SEC)	OFF	
	USB DEMO OFF(SEC)	OFF	

■ SVC

SVC	Item	Range	Use
	Test Pattern	Pattern Sel : off, White, Grey, Balck, Red, Green, Blue RRC PC Mode : On/Off Logic Pattern Sel Logic Level Sel	Test for input Scaler. If you can see pattern well, there is a problem at input of Scaler
	Panel Auto Setting		
	Panel Display Time	261Hr	
	Logic Usb D/L	off	
	Tuner Status	DVB (SNR 31, BER 0, Singal Strength 91, Bandwidth 8MHz, Frequency 482000kHz LNA Status On, FFT 2K, Modulation 16QAM, Code Rate 7/8, GI 1/8 Hair Modulation NONE, Frequency Offset 19000.00Hz, Timing Offset -11.00ppm AGC 79, UCB 0, PLL Type SEMCO121B, DEMOD Type DRX39xyK, TPS Lock LOCK RSLOCK Lock, SSI 91, SQI 100) ISDB-T (FFT Size_1, Guard Interval_1, Freq.Offset_1, SNR_1, IF AGC_1, TMCC Lock_1 TS Packet_1, Master Lock_1, A_Modulation_1, A_Code Rate_1, A_Timer InterLeave_1 A_Segments Num_1, A_BER_1, B_Modulation_1, B_Code Rate_1, B_Timer InterLeave_1 B_Segments Num_1, B_BER_1, C_Modulation_1, C_Code Rate_1, C_Timer InterLeave_1 C_Segments Num_1, C_BER_1)	

■ Expert

Expert	Item	Range	Use
	N/D ADJ	...	
	Source	...	

■ ADC/WB

ADC/WB	Item	Range	Use
	ADC	AV CAL : SUCCESS,COMP CAL : INITIAL , PC CAL : FAIL	
	ADC Target	Each MODE LOW,HIGH Delta(same as 09`)	
	ADC Result	Each MODE Calibration result value (same as 09`)	
	WB	8(Dynamic)+4(Movie)	

■ Advanced

FEB3	Item	Range	Use
	BM_slope	44	
	BM_start	40	
	BM_stat_max	110	
	Lfunc_gain	128	
	Hfunc_gain	128	
	ACR-Offset	10	
	Skin-UV	136	
	FEB Sub color	133	
	M-skin-UV	138	
	M-Sub Color	128	
	N_Skin_UV	128	
	N_Sub_Gamma	0	
	Color Gamut	129	
	LFUNC_TH1	28	
	LFUNC_TH2	70	
	LFUNC_TH3	130	
	LFUNC_OUT2	12	
	LFUNC_OUT3	95	
	LFUNC_OUT4	132	
	LFUNC_OUT5	132	
	UFUNC_TH1	17	
	UFUNC_TH2	95	
	UFUNC_TH3	178	
	UFUNC_OUT2	45	
	UFUNC_OUT3	75	
	UFUNC_OUT4	255	
	UFUNC_OUT5	255	
	PPHC_Red	-1	
	PPHC_Green	15	
	PPHC_Blue	1	
	PPHC_Cyan	7	
	PPHC_Magenta	-5	
	PPHC_Yellow	2	

WB Movie	Item	Range	Use
	W/B Movie ON/OFF	ON/OFF	
	MODE	Dynamic/Movie/Natural	
	Color Tone	Cool/NORMAL/WARM1/WARM2	
	MSub Brightness	128	
	Msub Contrast	128	
	N_Rgain	21	
	N_Bgain	-8	
	N_Roffset	-1	
	N_Boffset	1	
	W1_Rgain	...	
	W1_Bgain	...	
	W1_Roffset	...	
	W1_Boffset	...	
	W2_Rgain	...	
	W2_Bgain	...	
	W2_Roffset	...	
	W2_Boffset	...	
	Movie Contrast	95	
	Movie Bright	45	
	Movie Color	50	
	Movie Sharpness	20	
	Movie Tint	0	
	Movie Backlight	10	
	Movie Gamma	OFF	
	M_Sub_Gamma	0	
	HDMI Balck Level	Normal	
SubSetting	Item	Range	Use
	Gamma	0.95	
	PWM Max	100	
	PWM Mid	10	
	PWM Min	0	
	Contrast Dimming	OFF	
	7.5 IRE NTSC	...	
	7.5 IRE OFFSET	...	
	48Hz Enable	OFF	
	Peak Dimming	ON	
	Dynamic CE	ON	

ColorMapping	Item	Range	Use
	Auto_Red_R	50	
	Auto_Red_G	0	
	Auto_Red_B	0	
	Auto_Green_R	0	
	Auto_Green_G	50	
	Auto_Green_B	0	
	Auto_Blue_R	0	
	Auto_Blue_G	0	
	Auto_Blue_B	50	
	Auto_Yellow_R	50	
	Auto_Yellow_G	50	
	Auto_Yellow_B	0	
	Auto_Cyan_R	0	
	Auto_Cyan_G	50	
	Auto_Cyan_B	50	
	Auto_Magenta_R	50	
	Auto_Magenta_G	0	
	Auto_Magenta_B	50	
EPA 3D	Item	Range	Use
	Standard Contrast	95	
	Standard Brightness	45	
	Standard Sharpness	50	
	Standard Color	50	
	Standard Tint	0	
	Standard Backlight	7	
	3D Contrast	95	
	3D Brightness	45	
	V_3D PWM Delay_60	119	
	V_3D ANA Delay_60	245	
	V_3D PWM_Delay_50	107	
	V_3D ANA Delay_50	220	
	Motion plus Delay	0	
	Home Delay	0	
	Shop Delay	511	

CH_VDEC	Item	Range	Use
	AGC_mode	1	
	Gain_VCR	0	
	Y_Gain_Man	880	
	Y_Shape_sel	13	
	Y_shape_SCM	29	
	C_Shape_sel	4	
	C_Shape_SCM	4	
	If_iir	0	
	If_filt_sel	6	
	ST_Beg_NTSC	0	
	VS_Slice_Level	4	
	HS_Slice_Level	3	
	FB_Delay_adj	0	
	RGB_Dealy_adj	0	
	slice_mod_fine	0	
	scm_fdet_lvl	150	
	bl_range	3	
AR_ADC	Item	Range	Use
	PHASE	16	
	SOG_BW	7	
	SSC_PC	6	
	RGB_DLY	0	
YC_Delay	Item	Range	Use
	PAL_BG	0	
	PAL_DK	0	
	PAL_J	0	
	PAL_M	0	
	PAL_N	0	
	SECAM_BG	0	
	SECAM_DK	0	
	SECAM_L	0	
	NTSC_358	0	
	NTSC_443	0	
	AV_PAL	0	
	AV_PAL_M	0	
	AV_PAL_N	0	
	AV_SECAM	0	
	AV_NT358	0	
	AV_NT443	0	
	AV_PAL60	0	

CH_DP	Item	Range	Use
	BD_MAX_PERCENT_X	55	
	BD_MAX_PERCENT_Y	50	
	BD_DETAIL_AMT_MAX	0	
	BD_TOUCH_SUPP	8	
	BD_TOUCH_SUP_INV	24	
	DR_SIGMA_FIL_GAIN	20	
	DR_SIGMA_IN_ETE	12	
	SD2HD_Metric	196	
Sharpness	Item	Range	Use
	Pre_GainH1	12	
	Pre_GainH2	20	
	Pre_GainH3	30	
	Pre_GainV1	6	
	Pre_GainV2	16	
	Pre_GainV3	12	
	Post_GainH1	16	
	Post_GainH2	30	
	Post_GainH3	50	
	Post_GainV1	30	
	Post_GainV2	50	
	Post_GainV3	30	
	Post_GainPE1	180	
	Post_GainPE2	220	
	Post_GainPV1	100	
	Post_GainPV2	180	
	CTI_Gain	15	
	Pre_LTIH	8	
	LTI_H	20	
	LTI_V	20	
	PRE_CORNING_H	0	
	PRE_CORNING_V	0	
	POST_CORING	0	
	Pre_TOT	32	
	Post_TOT	32	
	SH Sub Color	59	

4. Troubleshooting

Sharpness_LNA	Item	Range	Use
	S1_Pre_GainH1	7	
	S1_Pre_GainH2	9	
	S1_Pre_GainH3	10	
	S1_Pre_GainV1	9	
	S1_Pre_GainV2	9	
	S1_Pre_GainV3	4	
	S1_Post_GainH1	14	
	S1_Post_GainH2	21	
	S1_Post_GainH3	0	
	S1_Post_GainV1	12	
	S1_Post_GainV2	19	
	S1_Post_GainV3	0	
	S1_Post_GainPE1	45	
	S1_Post_GainPE2	60	
	S1_Post_GainPV1	33	
	S1_Post_GainPV2	48	
	S2_Pre_GainH1	4	
	S2_Pre_GainH2	6	
	S2_Pre_GainH3	7	
	S2_Pre_GainV1	6	
	S2_Pre_GainV2	6	
	S2_Pre_GainV3	3	
	S2_Post_GainH1	9	
	S2_Post_GainH2	14	
	S2_Post_GainH3	0	
	S2_Post_GainV1	8	
	S2_Post_GainV2	12	
	S2_Post_GainV3	0	
	S2_Post_GainPE1	30	
	S2_Post_GainPE2	40	
	S2_Post_GainPV1	22	
	S2_Post_GainPV2	32	
	S3_Pre_GainH1	1	
	S3_Pre_GainH2	1	
	S3_Pre_GainH3	1	
	S3_Pre_GainV1	1	
	S3_Pre_GainV2	1	
	S3_Pre_GainV3	0	
	S3_Post_GainH1	2	
	S3_Post_GainH2	3	
	S3_Post_GainH3	0	
	S3_Post_GainV1	2	
	S3_Post_GainV2	3	
	S3_Post_GainV3	0	
	S3_Post_GainPE1	7	
	S3_Post_GainPE2	10	
	S3_Post_GainPV1	5	
	S3_Post_GainPV2	8	

LNA_Plus	Item	Range	Use
	Synctip_Noise	521	
	dB0	8	
	dB1	13	
	dB2	16	
	dB3	28	
	dB4	39	
	dB5	57	
	dB6	74	
	dB7	135	
	dB8	175	
	dB9	270	
	LNA+_Yfilter	11	
FRCS	Item	Range	Use
	FRCS LVDS Format	JEIDA	
	FRCS LVDS BitWidth	10Bit	
	FRCS LVDS Sequence	0-1	
	FRCS Hangup Detection	ON	
	FRCS FMD Demo	OFF	
LDASic	Item	Range	Use
	R_LD4_L3DD_RATIO	4	
	R_LD4_LD_ON	ON	
	R_DELAY	0	
	R_ALL_READ	0	
	R_LVDS_TX_FMT	1	
	R_LVDS_SW	0	

3D	Item	Range	Use
	EmitOn	On	
	EmitStartPosi60	2	
	EmitStartPosi50	2	
	EmitStartPosi48	2	
	3DSyncVstart60	275	
	3DSyncVend60	840	
	3DSyncVstart50	275	
	3DSyncVend50	840	
	3DSyncVstart48	275	
	3DSyncVend48	840	
	2D3D Focus	128	
	2D3D Depth1	10	
	2D3D Depth2	20	
	2D3D Depth3	30	
	2D3D Depth4	40	
	2D3D Depth5	50	
	2D3D Depth6	60	
	2D3D Depth7	70	
	2D3D Depth8	80	
	2D3D Depth9	90	
	2D3D Depth10	100	
	N240 PWM Delay_60	0	
	N240 ANA Delay_60	0	
	N240 PWM Delay_50	0	
	N240 ANA Delay_50	0	
	N240 PWM Delay_48	0	
	N240 ANA Delay_48	0	

Reading	Item	Range	Use
	POST_FDISPLAY	0	
	RAMP_SPEED	1	
	POST_RAMP_SPEED	1	
	LVDS_RX_FMT	1	
	LVDS_TX_FMT	1	
	LVDS_RX_BIT	1	
	LVDS_TX_BIT	1	
	POST_OUT1_ORDER	0	
	POST_OUT2_ORDER	1	
	POST_OUT3_ORDER	2	
	POST_OUT4_ORDER	3	
	CROSS_PATTERN	OFF	
	EnableFB	1	
	HMVSRMargin_2X_H	6	
	HMVSRMargin_2X_M	6	
	HMVSRMargin_2X_L	6	
	VMVSRMargin_2X	2	
	HSADPercentT1_2X	10	
	HSADPercentT2_2X	14	
	HMVSRMargin_FILM_H	6	
	HMVSRMargin_FILM_M	6	
	HMVSRMargin_FILM_L	6	
	VMVSRMargin_FILM	2	
	HSADPercentT1_FILM	10	
	HSADPercentT2_FILM	14	
LED Driver	Item	Range	Use
	VSYNC_DELAY_3D_50	399	
	VSYNC_DELAY_3D_60	399	

4. Troubleshooting

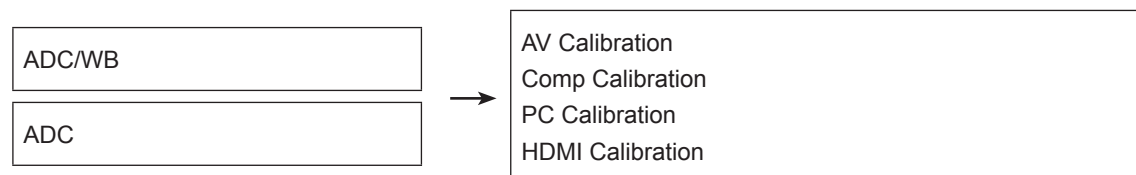
FRC	FRCQ Option	Item	Range	Use
		SSC_OnOff	ON	
		SSC_Width	96	
		SSC_Freq	240	
		FMD_Demo	0	
		CSB Vertical	ON	
		CSB Horizontal	ON	
		X_VStabStatVid	7	
		X_VStabStatF	0	
		X_VStabCorF	8	
		X_VStabSensF	48	
		X_HaloSizStatVid	7	
		X_HaloSizStatF	0	
		X_HaloSizCorF	12	
		X_HaloSizSensF	32	
		Film_Low_SD	31	
		Film_Medium_SD	6	
		Film_High_SD	0	
		Film_Low_HD	31	
		Film_Medium_HD	6	
		Film_High_HD	0	
		Video_Judder_Low	10	
		Video_Judder_Med	5	
		Video_Judder_High	0	
		Hangup Detection	ON	
		Q LVDS Seunce	0-1-2-3	
		Q LVDS Format	Jeida	
		Q LVDS bit width	10bit	
		PC_Mode_OnOff	OFF	

FRC	FRCQ Fallback	Item	Range	Use
		SensD_Film_Low	31	
		SensD_Film_Medium	31	
		SensD_Film_High	31	
		Rel_Start_Film	20	
		Rel_Slope_Film	3	
		H_Len_Start_Film	127	
		H_Len_Slope_Film	1	
		V_Len_Start_Film	40	
		V_Len_Slope_Film	1	
		SensD_Video	0	
		Rel_Start_Video	20	
		Rel_Slope_Video	1	
		H_Len_Start_Video	127	
		H_Len_Slope_Video	1	
		V_Len_Start_Video	40	
		V_Len_Slope_Video	1	

Picture Update

4-4. White Balance - Calibration

4-4-1 White Balance -Calibration



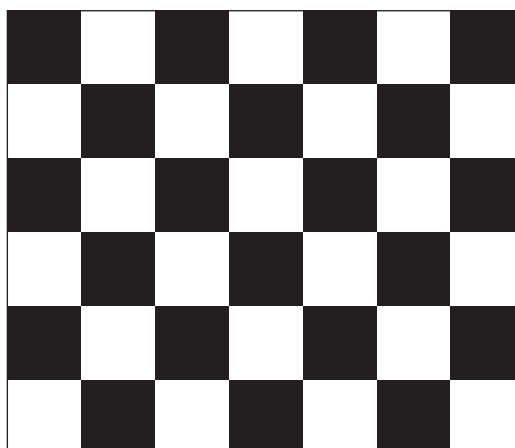
4-4-2 Service Adjustment

You must perform Calibration in the Lattice Pattern before adjusting the White Balance.

■ Color Calibration

Adjust spec.

1. Source : HDMI
2. Setting Mode : 1280*720@60Hz
3. Pattern : Pattern #24 (Chess Pattern)



(Chess Pattern)

4. Use Equipment : CA210 & Master MSPG925 Generator

- Use other equipment only after comparing the result with that of the Master equipment.

Input mode	Calibration	Pattern
CVBS IN (Model_#2)	Perform in PAL B&W Pattern #24	Lattice
Component IN (Model_#6)	Perform in 720p B&W Pattern #24	Lattice
PC Analog IN (Model_#21)	Perform in VESA XGA (1024x768) B&W Pattern #24	Lattice
HDMI IN (Model_#6)	Perform in 720p B&W Pattern #24	Lattice

<Table 1>

■ Method of Color Calibration (AV)

- 1) Apply the NTSC Lattice (N0. 3) pattern signal to the AV IN 1 port
- 2) Press the Source key to switch to "AV1" mode
- 3) Enter Service mode
- 4) Select the "Calibration" menu
- 5) Select the "AV Calibration" menu.
- 6) In "AV Calibration Off" status, press the "►" key to perform Calibration.
- 7) When Calibration is complete, it returns to the high-level menu.
- 8) You can see the change of the "AV Calibration" status from Failure to Success.

■ Method of Color Calibration (Component)

- 1) Apply the 720p Lattice (N0. 6) pattern signal to the Component IN 1 port
- 2) Press the Source key to switch to "Component1" mode
- 3) Enter Service mode
- 4) Select the "Calibration" menu
- 5) Select the "DTV Calibration" menu.
- 6) In "DTV (Component) Calibration Off" status, press the "►" key to perform Calibration.
- 7) When Calibration is complete, it returns to the high-level menu.
- 8) You can see the change of the "Comp Calibration" status from Failure to Success.

■ Method of Color Calibration (PC)

- 1) Apply the VESA XGA Lattice (N0. 21) pattern signal to the PC IN port
- 2) Press the Source key to switch to "PC" mode
- 3) Enter Service mode
- 4) Select the "Calibration" menu
- 5) Select the "PC Calibration" menu.
- 6) In "PC Calibration Off" status, press the "►" key to perform Calibration.
- 7) When Calibration is complete, it returns to the high-level menu.
- 8) You can see the change of the "PC Calibration" status from Failure to Success.

■ Method of Color Calibration (HDMI)

- 1) Apply the 720p Lattice (N0. 6) pattern signal to the HDMI1/DVI IN port
- 2) Press the Source key to switch to "HDMI1" mode
- 3) Enter Service mode
- 4) Select the "Calibration" menu
- 5) Select the "HDMI Calibration" menu.
- 6) In "HDMI Calibration Off" status, press the "►" key to perform Calibration.
- 7) When Calibration is complete, it returns to the high-level menu.
- 8) You can see the change of the "HDMI Calibration" status from Failure to Success.

4-4-3 White Balance - Adjustment

	(low light)	(high light)
3. W/B	Sub Bright R offset G offset B offset	Sub Contrast R gain G gain B gain

(W/B adjustment Condition refer next page)

4-5. White Ratio (Balance) Adjustment

1. You can adjust the white ratio in factory mode (1:Calibration, 3:White-Balance).
2. Since the adjustment value and the data value vary depending on the input source, you have to adjust these in CVBS, Component 1 and HDMI 1 modes.
3. The optimal values for each mode are configured by default. (Refer to Table 1, 2)
It varies with Panel's size and Specification.

- Equipment : CS-210
- Pattern: MIK K-7256 #92 "Flat W/B Pattern" as standard
- Use other equipment only after comparing the result with that of the Master equipment.
- Set Aging time : 60min ↑



- Calibration and Manual setting for WB adjustment.

HDMI : Time #6 720P, Pattern #24 Chessboard Calibration	→ Manual adjustment #92 pattern (720p)
COMP: Time #6 720P, Pattern #24 Chessboard Calibration	→ Manual adjustment at #92 pattern (720p)
CVBS: Time #2 PAL, Pattern #24 Chessboard Calibration	→ Manual adjustment at #92 pattern (NTSC)
PC: Time #21 1024*768, Pattern #24 Chessboard Calibration	→ Manual adjustment at #92 pattern (NTSC)

- If finishing in HDMI mode, adjustment coordinate is almost same in AV/COMP mode.
- White Balance Manual Adjustment

	CA-210				
		x	y	Y(L)	T(K) + MPCD
CVBS (NTSC)	H/L	272	278	- (Sub_CT:140)	12,000 (+/- 0)
	L/L	272	278	19.7cd/m ² (5.8 Ft - Sub_BR:128)	12,000 (+/- 0)
COMP (720P)	H/L	272	278	- (Sub_CT:140)	12,000 (+/- 0)
	L/L	272	278	19.7cd/m ² (3.5 Ft - Sub_BR:128)	12,000 (+/- 0)
HDMI (720P)	H/L	272	278	- (Sub_CT:140)	12,000 (+/- 0)
	L/L	272	278	19.7cd/m ² (5.8 Ft - Sub_BR:128)	12,000 (+/- 0)

- Adjustment Specification
- White Balance : High light (± 3), Low light (± 5)
- Luminance : High light (± 0.1 Ft/L), Low light (± 0.1 Ft/L)

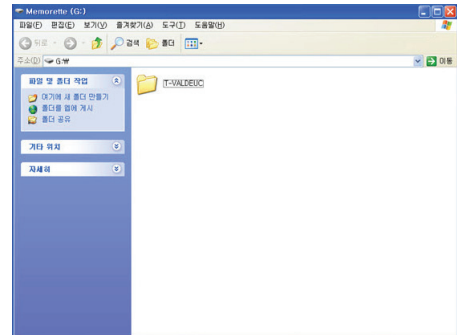
4-6. Servicing Information

4-6-1 USB Download Method

Samsung may offer upgrades for TV's firmware in the future. Please contact the Samsung call center at 1-800-SAMSUNG (7267864) to receive information about downloading upgrades and using a USB drive.

Upgrades will be possible by connecting a USB drive to the USB port located on the back of your TV.

1. Insert USB drive containing the firmware upgrading into the wiselink on the side of the TV.
(USB drive make folder "T-VALDEUC" and this folder download micom program.)



2. To enter User menu

Support - Software Upgrade - By USB then press the ENTER button. The message USB searching...

It may take up to 30 seconds is displayed.

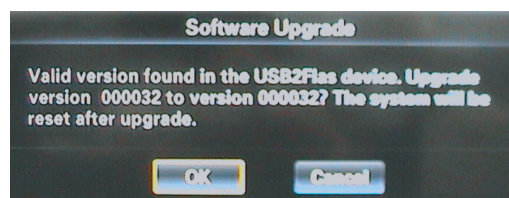
Please be careful to not disconnect the power or remove the USB drive while upgrade is being applied.

Next message : refer to "Second picture"

Press the left, right button to select "OK".

The TV will shut off after completing the firmware upgrade

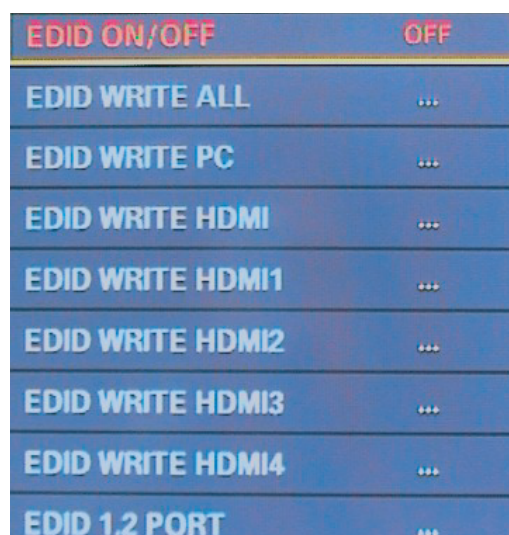
Please check the firmware version after the upgrade is complete.



* How to check Program Version

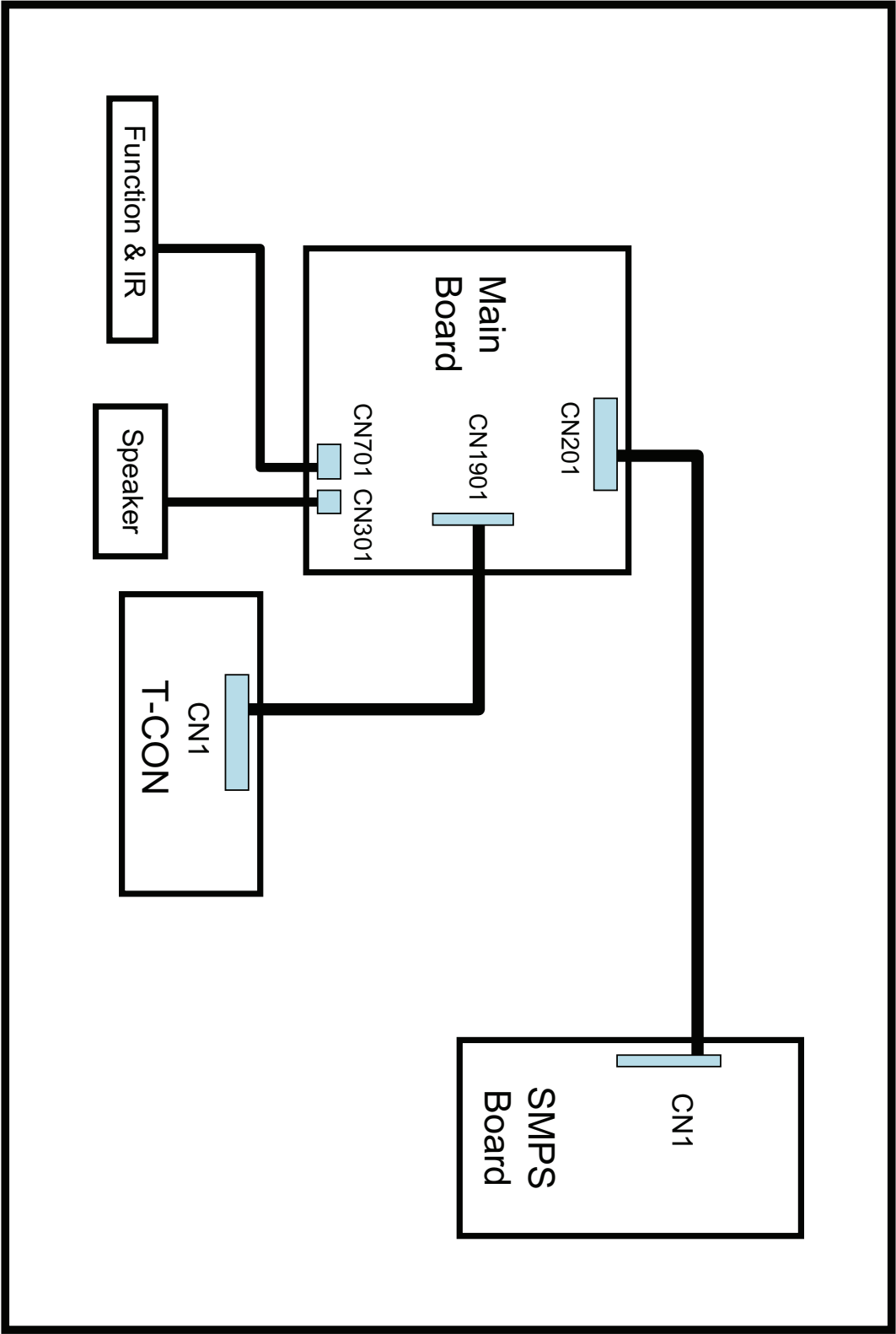
1. To enter Factory mode

2. Check the main micom version T-VALDEUS-XXXX



6. Wiring Diagram

6-1. Wiring Diagram



6-2. Connector

CN1901(to Panel)			
1	NC	42	Tx1_AN
2	NC	43	GND
3	NC	44	GND
4	NC	45	GND
5	NC	46	NC
6	NC	47	PANEL_VCC_PW
7	GND	48	PANEL_VCC_PW
8	SDA_PANEL2	49	PANEL_VCC_PW
9	PANEL_WP	50	PANEL_VCC_PW
10	NC	51	PANEL_VCC_PW
11	NC	52	GND
12	SCL	53	TX2_AN
13	GND	54	TX2_AP
14	TX3_EP	55	TX2_BN
15	TX3_EN	56	TX2_BP
16	TX3_DP	57	TX2_CN
17	TX3_DN	58	TX2_CP
18	GND	59	GND
19	TX3_CLKN	60	TX2_CLKN
20	TX3_CLKP	61	TX2_CLKP
21	GND	62	GND
22	TX3_CP	63	TX2_DN
23	TX3_CN	64	TX2_DP
24	TX3_BP	65	TX2_EN
25	TX3_BN	66	TX2_EP
26	TX3_AP	67	GND
27	TX3_AN	68	TX4_AN
28	GND	69	TX4_AP
29	TX1_EP	70	TX4_BN
30	TX1_EN	71	TX4_BP
31	TX1_DP	72	TX4_CN
32	TX1_DN	73	TX3_CP
33	GND	74	GND
34	TX1_CLKP	75	TX4_CLKN
35	TX1_CLKN	76	TX4_CLKP
36	GND	77	GND
37	TX1_CP	78	TX4_DN
38	TX1_CN	79	TX4_DP
39	TX1_BP	80	TX4_EN
40	TX1_BN	81	TX4_EP
41	TX1_AP	82	GND

CN201(POWER)			
1	B12V	10	GND
2	A5V	11	GND
3	B12V	12	B5V
4	GND	13	B13V
5	B5V	14	TOP_PWM_DIMMING
6	B5V	15	B13V
7	B5V	16	SW_INVERTER
8	GND	17	B13V
9	GND	18	DET_5V

CN503_EU(to Component)			
1	GND	9	COMP_PR
2	COMP_Y	10	GND
3	IDENT_COMP_AVI	11	COMP_AVI_SL_IN
4	GND	12	COMP_AVI_SR_IN
5	COMP_PB	13	GND
6	COMP_PB	14	COMP_AVI_SR_IN
7	GND	15	COMP_AVI_SL_IN
8	COMP_PR		

CN603(to HDMI1)			
1	HDMI1_RX2+_HDMI	11	GND
2	GND	12	HDMI1_RXCLK-_HDMI
3	HDMI1_RX2-_HDMI	13	HDMI_CEC
4	HDMI1_RX1+_HDMI	14	GND
5	GND	15	HDMI1_SCL_DDC
6	HDMI1_RX1-_HDMI	16	HDMI1_SDA_DDC
7	HDMI1_RX0+_HDMI	17	GND
8	GND	18	HDMI1_5V
9	HDMI1_RX0-_HDMI	19	HDMI1_HPD
10	HDMI1_RXCLK+_HDMI		

CN604(to HDMI2)			
1	HDMI2_RX2+_HDMI	11	GND
2	GND	12	HDMI2_RXCLK-_HDMI
3	HDMI2_RX2-_HDMI	13	HDMI_CEC
4	HDMI2_RX1+_HDMI	14	GND
5	GND	15	HDMI2_SCL_DDC
6	HDMI2_RX1-_HDMI	16	HDMI2_SDA_DDC
7	HDMI2_RX0+_HDMI	17	GND
8	GND	18	HDMI2_5V
9	HDMI2_RX0-_HDMI	19	HDMI2_HPD
10	HDMI2_RXCLK+_HDMI		

CN602(to HDMI3)			
1	HDMI3_RX2+_HDMI	11	GND
2	GND	12	HDMI1_RXCLK-_HDMI
3	HDMI3_RX2-_HDMI	13	HDMI_CEC
4	HDMI3_RX1+_HDMI	14	GND
5	GND	15	HDMI1_SCL_DDC
6	HDMI3_RX1-_HDMI	16	HDMI1_SDA_DDC
7	HDMI3_RX0+_HDMI	17	GND
8	GND	18	HDMI1_5V
9	HDMI3_RX0-_HDMI	19	HDMI1_HPD
10	HDMI3_RXCLK+_HDMI		

CN601(to HDMI4)			
1	HDMI4_RX2+_HDMI	11	GND
2	GND	12	HDMI4_RXCLK-_HDMI
3	HDMI4_RX2-_HDMI	13	HDMI_CEC
4	HDMI4_RX1+_HDMI	14	GND
5	GND	15	HDMI4_SCL_DDC
6	HDMI4_RX1-_HDMI	16	HDMI4_SDA_DDC
7	HDMI4_RX0+_HDMI	17	GND
8	GND	18	HDMI4_5V
9	HDMI4_RX0-_HDMI	19	HDMI4_HPD
10	HDMI4_RXCLK+_HDMI		

CN502(to PC)			
1	PC_RED	9	5V
2	PC_GREEN	10	PC_IDENT
3	PC_BLUE	11	GND
4	GND	12	SDA
5	GND	13	PC_HS
6	GND	14	PC_VS
7	GND	15	SCL
8	GND		

CN301(Speaker Out)			
1	R-_OUT	3	L-_OUT
2	R+_OUT	4	L+_OUT

OP301(Optical Jack)			
1	VIN	3	GND
2	VCC		

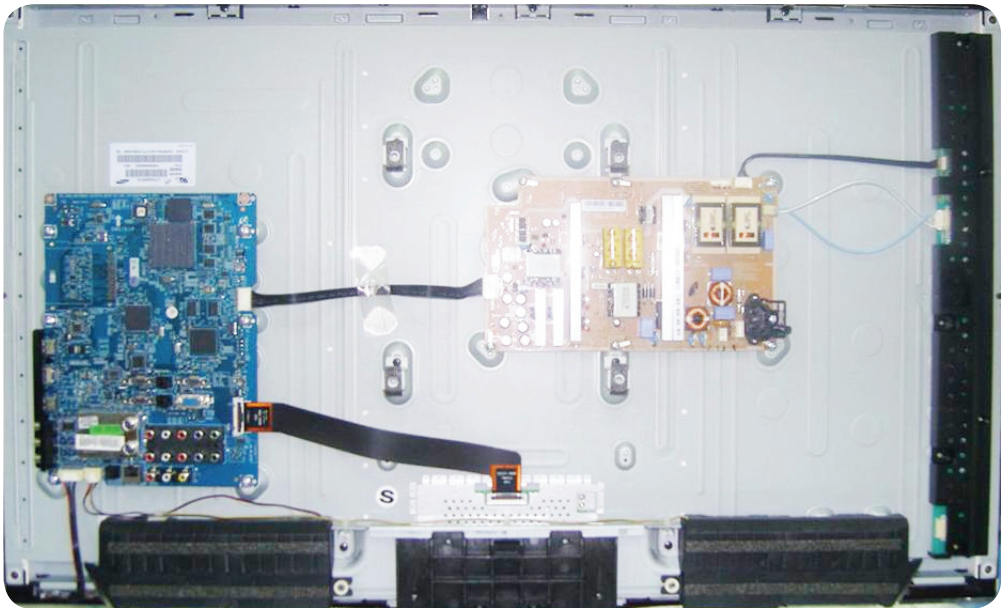
CN506(to SIDE_AV)			
1	GND	6	SIDE_AV_SL_IN
2	INDENT_SIDE_AV	7	GND
3	SIDE_AV_CVBS	8	SIDE_AV_SR_IN
4	GND	9	SIDE_AV_SL_IN
5	SIDE_AV_SR_IN		

CN1602(USB0)			
1	USB0_5V_PW	3	USB0_DP
2	USB0_DM	4	GND

CN1601(USB1)			
1	USB1_5V_PW	3	USB1_DP
2	USB1_DM	4	GND

CN701			
1	IR	6	KEY_INPUT1
2	GND	7	KEY_INPUT2
3	3.3V	8	LED_STB
4	MSCL_A5V	9	LED_CNTR
5	MSDA_A5V	10	3.3V

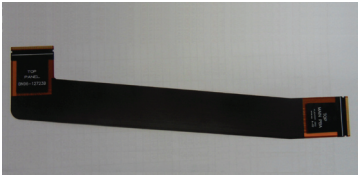
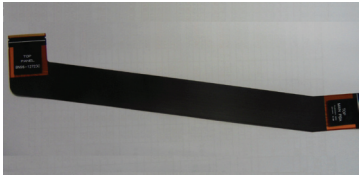
6-2. Wiring Picture



6-3. Connector Functions

Connector	Functions
Panel ↔ CN1901	The LVDS signal transfered Panel to Main Board. * defective symptom : No picture but normal sound
SMPS ↔ CN201	Supply dimming and main power from IP,SMPS to Main Board. * defective symptom : No picture, repeat power On/Off

6-4. Cables

Code	BN96-12723A(LVDS_32)	BN96-12723B(LVDS_37)	BN96-12723C(LVDS_40)
Photo			
Code	BN96_12723D(LVDS_46)	BN96-12723E(LVDS_55)	
Photo	